





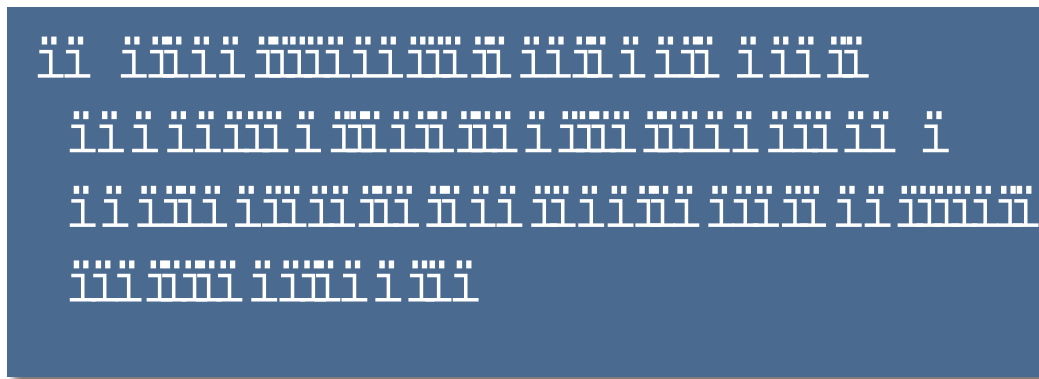
By Kim Silva, E2 Foundation

When we think of sustainability, we tend to think “going green” or recycling. Over the last few months, I’ve learned that while “going green” and recycling are vital parts of sustainability, they really are just the first steps toward a larger systematic approach:

- Sustainability is about the future.
- It is strategic and whole-system focused.
- It is about social equity, economics, and the environment.
- It is about reverting the damage done to the environment by generations of people so that everyone, regardless of social status, has access to healthy water, air, food, soil.

the long term in the most economical and effective way for school districts. We can literally use our work, education, as a tool to transform our society to achieve sustainability. Isn’t that cool?

In our little corner of the world, we can change the future for everyone, the entire planet. But, why an ESD? Because we are all-inclusive, covering all disciplines, and we exist to support schools. Schools are already trying to engage in sustainability, so we need to step up to help them. But, why MESD? Because we lead when called to lead. Who knows better about how to include all students into a system that is built on tradition than those of us who work for MESD? We lead in change and inclusion. And, we can lead in this change - a change our community is demanding. Again, pretty cool, huh? Now, you can see the connection.



If the most educated nations leave the deepest ecological footprint, how can we integrate sustainability into everything that we do to reverse this trend - the ultimate goal of sustainability? Yes, I know. Heady stuff. It sounds overwhelming and you want to stop reading, but keep reading. This is really exciting and it can benefit all of us at MESD.

This is how we started down the sustainability path...in an effort to build local corporate support for the Metro-Outdoor School partnership, **Dan Prince** and I have been attending many community events. The partnership is based in waste reduction practices, so, naturally, we’ve chosen to attend events with corporations who are interested in sustainability. At one of these events, Dan and I came to realize that the MESD could, and should, be a leader in sustainability for Multnomah County schools. If the future job growth is in the sustainability sector, then why wouldn’t we want to lead the effort to educate our students toward those careers?

As luck would have it, at the same time, **Ron Hitchcock** was hearing a presentation by the Sustainable Oregon Schools Initiative (SOSI) at the annual OAESD conference and his interest was peaked. As we all learned more, we realized the scope and depth of sustainability was immense, so we decided to focus. How can the MESD support sustainability with what we do best - education kids and helping school districts to educate kids?

Believe it or not, an ESD is all about sustainability for school districts - particularly the ability to sustain specialized services on

MESD is a leader for inclusion, school service, and change. Yes, we should also lead systemic sustainability efforts on behalf of the districts we serve.

Our first step was to create a sustainability team. The team has met twice and we’ve created a timeline of activities to get us started. You will soon see a survey asking you about your sustainability efforts. Please take a few minutes to respond to the survey. It will be just a few questions, so won’t take much of your time. You don’t have to be a tree-hugging greener like those of us in Outdoor School or the Foundation, but this does involve you.

One of our goals comes down to money for each of us - if we can save money on energy, garbage management, waste, and more, then we can use that money to get more services or materials for our students, to lower our out-of-pocket expenses for health care, or to increase our pay. You see? Each person has an investment in this process. Please complete our survey about how we can institute sustainable practices at MESD - here’s the link:

<http://www.zoomerang.com/Survey/?p=WEB228WC7T9FRQ>.

If you want to do more, please let **Dan Prince**, **Mark Wheeler**, or me know and we will include you in the sustainability team. Together, we can change the world for our students, our families and ourselves. 🌱

MESD's Le Huynh, of Human Resource Services, and her husband live in a house that employs a traditional "green" building method used in Europe and in the American southwest. Their straw bale and cob construction house reflects their effort to integrate earth-conscious construction and self-expression into their life style. Interaction appreciates Le's willingness to be interviewed for this issue.



## Finding comfort, savings and artistic satisfaction:



*While most of us live in houses built by traditional methods, I understand that you live in a house constructed with straw bales. What inspired you to go in this direction?*



My husband and I were inspired by a Natural Building Colloquium (Now called Village Building Convergence). This is hosted every year by CityRepair Projects since 2001 in the month of May or June) back in 2001. It was our first exposure to straw bales and cob building. We attended a couple of workshops and lectures during this time and got hands on experience on

building with cob and straw bales. I want to clarify that our house is a hybrid of straw bale and cob house construction. My husband is an artist and loves the idea of being able to sculpt a house with mud. It started out because we were environmentalists and wanted to build with materials that were sustainable and safe. I didn't realize how much I would actually like living in one and how much more comfortable one is than a standard timber frame house.

*Did you actually build it yourselves? Did you have help? How long did it take?*

Yes. We did, with a few volunteer helpers. It took about two building seasons, since we could only work when it wasn't cold and wet outside.

*What about energy efficiency - does the house have advantages over traditional construction?*

Regarding energy efficiency, our straw bale wall has an R-value of 40-50 depending on who you talk to. In addition to the high R-value, cob (which coats the straw bales and some internal and external walls are made completely of cob, and the earthen floor act as a thermal battery,) acts as a thermal battery absorbing heat from solar gain and wood stove and then releasing it at night. We built our house with a passive solar design so it faces south with large windows. Because the wall structure is not made of wood, it is very fire resistant. The straw bales has 6 inches of cob on each side, so it protects it from the elements. Our roof structure is traditional with a metal roof, so if there is a fire, that would be the first thing to burn.

*Since you completed your house, have you and your husband shared your knowledge and experience in building using straw bales and cob with others? Do you get inquiries from individuals or groups who are interested in green building techniques?*

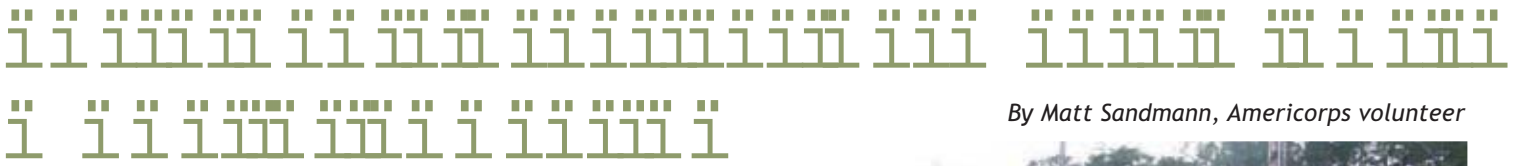
Yes, we gets lots of inquiries from groups, individuals, and the media. We were featured in Oregon Homes in the Green building issue in 2007. My husband is a natural building instructor and consultant, teaching workshops from earthen art to school children, leading workshops on constructing cob benches in public areas and schools, teaching a classes on how to build your own house, wood fire oven, rocket mass heater. (FYI, by training, he's an artist and licensed art teacher. He taught art for several years at Kraxberger Middle School prior to this.) His past projects includes the Oregon City Trail Crossing Bus stop, Mt. Tabor Middle school bench, Pacific Crest Community School bench. In July, he will be teaching at SolWest Renewable Energy Fair in John Day. We also get inquiries from individuals (locally and out of town folks) who want to come out and see our house.

*Do you have any advice for others who want to learn about green building techniques or are looking at other ways to increase the sustainability of their lifestyles?*

**Green building techniques:** We read a couple of really good books. My husband volunteered to get hands on experience. Read books, attend workshops, call a builder up and volunteer your time, experiment, take risks, just do it. (see [www.naturalbuildingnetwork.org](http://www.naturalbuildingnetwork.org))

**Increasing sustainable lifestyle:** Start small with things you have control over. We started out recycling, composting, and biking and avoided disposable products (paper plates, plastic containers, packaged food). As we became more committed, we started joined a CSA (community supported agriculture), growing some of our food, consumed less, and made friends with like minded individuals.

There is a belief that being sustainable cost more and some things do cost more, but there are many things that cost the same or even less. Part of the reason is that all the mainstream media regularly shows the middle to high end income bracket consumer who has built a "green home" or buys only organically grown produce. It doesn't have to cost more. It does however take more time. It takes more time to grow your own organic fruit and vegetables, re-use your shopping bag, cook meals instead of going out or buying package food, bike or bus to work instead of driving... ■



By Matt Sandmann, Americorps volunteer

After being asked by **Mark Skolnick** to contribute a few paragraphs regarding sustainability and our efforts at Alpha to come closer to that goal, I was filled with excitement and, I must admit, uncertainty regarding how to address such a pressing and oftentimes confusing and controversial topic. I began to ask myself, Alpha staff, and students, what it meant when we spoke about sustainability. What I found was a broad array of explanations, encompassing almost every aspect of our modern society, all with integral roles to play in this idea we call “sustainability.”

Even the sustainability experts have a tough time finding a consensus for a definition of this word. The most widely accepted definition is that sustainability is: “meeting the needs of the present without compromising the ability of future generations to meet their own needs.”

They also agree that it consists of three essential pillars: environmental, social, and economic. As schools, we are in a unique position to positively affect all three of these areas, often simultaneously. Alpha, being a “school-to-work” program, has an even greater opportunity to do just this, as students are afforded an opportunity that would not be possible in a traditional school setting: the ability to engage the community through work at their jobsites.

Now in its eighth year, Alpha’s Conservation Corps (ACC) has embodied this idea. Through the leadership of Alpha Science teacher **Michael Lancaster** and hard work of Alpha student participants, the ACC has spent countless hours working on community stewardship projects including environmental restoration through invasive plant removal and native plantings, and water quality testing among others. They have formed mutually beneficial community partnerships, helping non-profit and governmental organizations reach their goals in a economically, socially, and environmentally sustainable way.

Another cornerstone program for the last several years has been Alpha’s Environmental Projects Jobsite, which I have had the pleasure of coordinating since this September. We have taken on a number of sustainability-related projects as part of our Oregon Green Schools certification (check out [www.oregongreenschools.org](http://www.oregongreenschools.org) to learn more about this program).

Our focus has been on waste reduction, recycling, and energy and water use. The first task in this process was assessment; the students and I poured over utility bills and conducted waste and recycling audits (literally sifting through our trash to see how efficiently we were recycling). The information we gathered gave us a clearer picture of what we were doing well and where we needed to improve. We had brainstorming sessions to develop effective strategies, which resulted in projects such as construction of a worm composting bin (to convert our lunch scraps into high quality compost for our garden), and students educating their classmates about these issues through presentations. These projects have seemingly focused on the environmental aspects of sustainability, but have far-reaching effects on the other two pillars of the concept. If we are able to reduce energy use, we not only reduce our school’s carbon emissions (environmental), but reduce energy costs (economic), allowing us to invest more in educational programs (social). I am pleased to say that these efforts have been recognized, and Alpha is now a certified Oregon Green School.



▲ Alpha’s Conservation Corps hard at work clearing Himalayan Blackberry from a hillside.



Alpha’s Conservation Corps conducts a waste audit. Dirty work but someone has to do it! ▶

Alpha’s Summer Program lending a hand at Oregon Tilth’s Jean’s Farm ▼



While these steps are certainly essential and have a positive role to play in the journey toward sustainability, much more needs to be done. In my short time at Alpha and MESD, I have seen a dedication to working on this issue at all levels, from students to administrators, that has given me much hope. But, as we continue to discuss sustainability, and all that it implies, let us not lose sight of what we are really working for. If you need reminding, just think for a moment about the antithesis of sustainability, “unsustainability.” Think about this in its most literal sense, and what that implies for MESD, our communities, and the generations to follow.

As Alpha student **Josue Ramirez** put it: “I don’t want people in the future to look at us and say, ‘You did nothing.’”

“Yeah, we want to do something, we want to try,” commented **Josh Gonzalez**. 🌱



# Metro's waste reduction curriculum reduces Outdoor School costs

By Dan Prince, coordinator

"Toward a sustainable region" is the phrase that introduces a new partnership between MESD Outdoor School and Metro, the regional government that serves much of Multnomah, Clackamas and Washington Counties. But the Outdoor School program has been working toward sustainability for over four decades. This most recent partnership is yet another way our region and our agency lead the way toward sustainability.

"Sustainability" has multiple meanings, and at Outdoor School it can be seen in many areas. The first element of sustainability that comes to most folks' minds relates to environmentally friendly practices and, for Outdoor School, instruction. Students at Outdoor School serve the community on a recycling duty, they examine a worm bin to understand composting, and they challenge themselves and others to reduce food waste at each meal.

On field study, students engage in activities that help them understand natural processes and, critically, how their activities affect those processes. What happens to water quality when pesticides enter the watershed? How can you help avoid erosion when out on a hike? How does recycling paper affect forests in Oregon?

This spring begins a new partnership with Metro to provide enhanced waste reduction education at Outdoor School. The partnership with Metro not only helps schools financially in a time of budget crisis, it also will increase Outdoor School's capacity to provide meaningful, hands-on waste reduction education. Metro will help with resources for our instructional staff and participating teachers, professional development, and assessment of instructional outcomes.

The project is great for Metro because Outdoor School is uniquely positioned to reach a broad swath of the region's population with conservation education. Metro has an excellent waste reduction education program, but they don't have the capacity to reach every 6th grade classroom in the county. Outdoor School does. Solid waste disposal fees will pay for a day of waste reduction education at Outdoor School, using the effective, science-based, hands-on strategies we have developed over 43 years of experience.

Sustainability goes beyond being "green." A second arena in which to promote sustainability is in the area of fiscal sustainability. Here we rely on partnerships as well as the discipline of Outdoor School staff. The Friends of Outdoor School is a large network of community members who donate to help send kids to Outdoor School. **Business partner IKEA** donated reusable serving dishes with lids to cut down significantly on the use of foil and plastic wrap in our kitchens: environmentally and fiscally friendly!

By developing excellent working relationships with our Outdoor School site owners, we enjoy significant discounts in rent to house our programs while we promote careful stewardship of Outdoor School sites. Mutually beneficial partnerships make it possible to keep our cost of service exceptionally low. This year our cost per pupil for a six-day, five-night experience is just under \$300. Compare that with two local residential summer camps: full tuition ranges from at \$535 to \$565 for a week of general overnight camp.

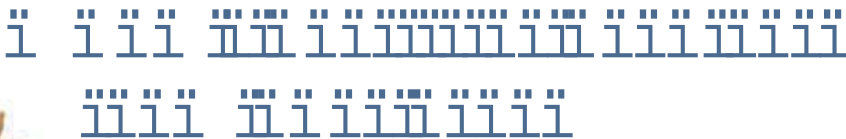
In the office we fill our printer with paper that is already used on one side—adequate for the majority of our office printing jobs. For large meetings we serve water with sliced lemons. We could be called "cheap," but we prefer "resourceful."

The third arena of sustainability is focused on building sustainable communities through equity and social justice. Here again, partnerships are the key to success. Perhaps the most important way Outdoor School promotes this value is in partnership with our component districts. Because our districts have always chosen to participate at the district level, Outdoor School remains an opportunity for every sixth grade child in our county. This is a fairly unique approach in the state and across the nation, where often it is up to individual schools or classrooms to engage in an Outdoor School program. Unfortunately, this can easily lead to more affluent communities having better access to programs like this.

Sometimes families are reluctant to send their child to Outdoor School, especially if they are new to the country or have difficulty with the English language. Friends of Outdoor School recently secured grant funding to translate outreach and instructional materials into Russian, Spanish and Vietnamese to help us communicate more effectively with all of our families. This comes on the heels of outreach to the community via our district advisory committee members, including an open house for parents with translation services provided by Centennial and David Douglas School Districts and efforts to recruit more bilingual high school student leaders to volunteer at Outdoor School.

There is much more work to be done to move us toward a sustainable region. Through resourcefulness, commitment and partnership, we hope to continue progress down that path. 🌱





By Mark Wheeler, supervisor



Pattie Lincoln and Suzie Bouse

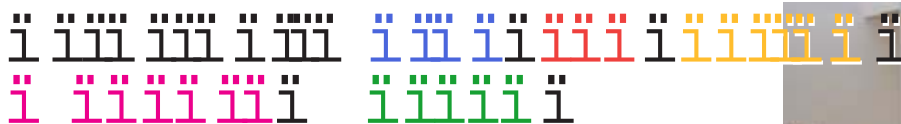
In assisting with the continuing efforts to help the MESD go green, the facilities team has instituted two new recycling programs for our recyclable materials agency wide.

We have helped to implement the office paper/cardboard recycling efforts that currently exist thorough the agency, but now the facilities team has taken recycling one step further with the ability to recycle batteries as well as Styrofoam products.

Our Styrofoam program allows anyone agency wide to recycle their Styrofoam products free of charge. We have arranged to recycle our Styrofoam material with Pacific Recycling at no cost to the agency. This saves us from disposing a huge amount of material per year (imagine how much Styrofoam packaging we receive per year) and saves our landfills. Excess Styrofoam can be brought to the mailroom at the Ainsworth location and we will take it from there.

Our recently initiated battery recycling program allows anyone agency wide to recycle their used batteries by simply bringing them to the mailroom at Ainsworth or sending them (via pony) to the Ainsworth site. We sort the rechargeable from the alkaline batteries and recycle them with Battery-Plus. The only batteries we cannot accept are acid filled such as car batteries. In the first month we offered this service, we collected just over 100 pounds of batteries. We are very grateful for the enthusiastic response we have had to this program.

With our ever-expanding need to re-use and recycle worldwide, the facilities team has made it easier for our agency to do its part and go green. Stay tuned for more facilities team recycling programs in the future. 🌱



## MESD's Printing and Graphics Services switches to a "green" digital press

By Carolee Iselin, supervisor

This year, MESD's print shop made the switch to digital imaging on a state-of-the-art Presstek offset press that produces ultra-high resolution on black, spot color and 4-color projects. Beside the production benefits for our customers, the press is also eco-friendly in the following ways:

- Chemistry-free imaging. Thermal laser digital imaging of plates eliminates the need for plate chemistry. On-press chemistry free imaging of the plates is safer and healthier. It eliminates chemicals, film and aluminum plates.
- Eliminates fountain solutions and the accompanying waste - a byproduct of traditional printing presses.
- Eliminates the need to use solvents for cleaning and maintenance -90% reduction
- Waterless ink technology reduces the water consumption and the tainted waste water; eliminates VOC (volatile organic compound) emissions.
- Reduced waste - no chemistry to dispose of and the quick 'up to ink' time reduces paper waste.
- The fast up-to-ink time, reduces paper waste.
- The DI's all-in-one process, usage of fewer supplies - reduces its environmental footprint. 🌱



### INTERACTION

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**Editorial Staff:** Mark Skolnick, Janelle Emery

**Design & Production:** MESD Printing & Graphic Services

**Contributors:** Ron Hitchcock, Le Huynh, Carolee Iselin, Dan Prince, Matt Sandmann, Kim Silva, Mark Skolnick and Mark Wheeler

For more about Multnomah Education Service District's programs, people, and community go to:

[www.mesd.k12.or.us](http://www.mesd.k12.or.us)