

Michigan Child Care Matters

Department of
Human Services

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Go Green

FROM THE DIVISION DIRECTOR James S. Sinnamon

This issue of Michigan Child Care Matters focuses on ways those of us in early care and education can be environmentally friendly. Early childhood caregivers have been practicing green for years. Your creativity manifests itself in an ability to see learning opportunities in stuff that others would just throw away. In classrooms, storage rooms and garages sit boxes and bags of recycled paper, string, cardboard, Styrofoam, and fabric waiting to be transformed into colorful projects and treasures created by toddlers and preschoolers and proudly displayed on refrigerators by their parents.

There are many benefits to going green. It's much less expensive to get your supplies from recycled materials instead of buying new. Often you can save precious time when parents bring these materials directly to you because you won't have to spend time shopping for supplies and materials. Children will begin to see recycling in action. Instead of just throwing things away, they begin to think about more creative ways to use empty jars, boxes and more.

As spring unfolds around us and the landscape changes from grey to green, it is a good time to remember to go green. ❖

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This publication provides relevant information regarding young children who are cared for in licensed child care settings. We encourage child care providers to make this publication available to parents of children in care, or to provide them with the Web address so they may receive their own copy. Most issues are available online at:

www.michigan.gov/michildcare.

THE THREE Rs: REDUCE, REUSE AND RECYCLE

Catherine Edgar, Licensing Consultant
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Over the past few years, we have all witnessed efforts by individuals, businesses and even government to go green as a way to protect our planet's natural resources for future generations. Not only is going green good for the environment, but it can also save you money and teach children in care important habits that they can use throughout their lifetime.

The three main principles of going green are reduce, reuse and recycle. The following are tips for both child care centers and homes to lessen their negative impact on the environment.

Reduce

According to the Environmental Protection Agency, between 1960 and 2008 the amount of waste each person creates has almost doubled from 2.7 to 4.5 pounds per day. One way to reduce waste in your child care facility is to buy quality toys and equipment. Quality toys and equipment will far outlast their cheaper counterparts. High quality toys and equipment can be purchased secondhand at garage sales, mom-to-mom sales and online at sites such as craigslist (www.craigslist.com). Just be sure to do some research before you purchase these items to make sure none of the toys or equipment has been recalled due to safety concerns. You can find this information at www.cpsc.gov.

Another way to reduce waste in your child care facility is by buying in bulk. This will not only reduce the amount of trash you are producing but will also save you money. Buying items such as yogurt in a large container and serving it to children in reusable dishes is both cheaper and greener than buying pre-packaged individual cups of yogurt. Child care providers can also invest in reusable tableware and utensils instead of buying (and discarding) paper plates and plasticware. This will also save money while lessening the effect on the environment.

A child care facility can reduce the amount of organic waste thrown away, such as table scraps, by building or purchasing a simple composter. A bonus to composting is that while reducing the amount of organic materials going into landfills, you will also be producing nutrient-rich compost that can be used to enrich your garden. Information about composting can be found at your local library or at www.epa.gov.

To reduce the amount of toxic chemicals to which children in care are exposed, use paint, carpeting and floor coverings low in volatile organic compounds (VOCs) whenever possible. High levels of VOCs found in paints and coatings can have a negative impact on health, especially in young children. Household items such as cleaners can be made from common household items, which not only will save you money but are also safer to use. The article “Green Cleaning” on page 10 has detailed information on making your own household products.

Reuse

Common household items routinely discarded can be reused in the child care setting. Plastic containers can be reused to store items such as homemade play dough and paint. Items such as packing peanuts and bubble wrap can be used in craft and art projects. Clay pots, tin cans or margarine tubs can be used to construct a toad house. Maracas can be made by covering the ends of a toilet paper roll with paper and putting beans or rice inside.

Two projects using discarded water bottles are creating an ocean in a bottle and a treasure bottle. To make an ocean in a bottle, simply remove the label from a water bottle and fill it halfway up with water that you have colored with food coloring. Fill the rest of the bottle with cooking oil. Seal the bottle by putting some glue on the threads of the cap and tightening. You can also seal it with duct tape for added assurance. Children will enjoy the waves they can create in the bottle due to the water and oil separating from one another.

A treasure bottle can be made by again removing the label from a discarded water bottle. Fill the bottle 2/3 of the way up with rice or sand and add a few trinkets such as charms,

little toys or plastic insects. Seal the bottle so that children cannot open it. Young children will enjoy finding the hidden treasures by moving and shaking the bottle.

The following is a list of just a few of the many websites devoted to projects for children using recycled items:

- www.kinderart.com/recycle.
- www.allfreecrafts.com.
- www.planetpals.com.
- www.thegreenparent.com.
- www.abcteach.com.

“We do not inherit the earth from our ancestors; we borrow it from our children.”
-Native American Proverb

Recycle

Encourage recycling at your child care facility by keeping a bin available for items that can be recycled locally such as cans, plastic and paper. Encourage parents to bring in their household items to recycle

at your facility. Children will learn that most items can be recycled instead of being thrown away. You can also set up special bins so parents can drop off items such as cell phones which can be taken to your local cell phone provider for donation to local women’s shelters or to soldiers overseas. Tennis shoes can also be collected and taken to any Nike store to be recycled into playground surfaces. Check with local shoe stores to see if they participate in shoe recycling.

Going green in child care can be an educational and rewarding experience for both children and caregivers. Teaching children the importance of reducing, reusing and recycling today will provide lifelong lessons about environmental responsibility. To quote a Native American proverb: “We do not inherit the earth from our ancestors; we borrow it from our children.” ❖

GREEN READING

Dawnita Diaz, Licensing Consultant
Ottawa County

As we implement ways to bring green living into child care, there are many books to compliment this process. There are books that emphasize caring for the earth, managing our resources and practical steps for green living every day. Green living is a practice that is important for each one of us no matter where we live. Assist children in care in choosing books that partner with hands-on activities to further emphasize the importance of protecting our earth and its resources.

Here is a listing of children's books about recycling and protecting the earth, categorized by age group.

Preschool through School-Age



- “We are Extremely Very Good Recyclers” by Lauren Child. (The television characters Lola and Charlie collect items to recycle. There is a chart in the back of the book to track items children may find to recycle.)
- “Michael Recycle” by Ellie Bethel. (A superhero teaches children how to recycle and save the earth.)
- “Recycle! A Handbook for Kids” by Gail Gibbon. (Provides scientific information and projects for recycling.)
- “Where Does Garbage Go?” by Paul Showers. (Provides information on how garbage is handled and the problem of too much trash.)
- “The Adventures of a Plastic Bottle: A Story about Recycling” and “The Adventures of an Aluminum Can” by Allison Inches. (A plastic bottle and an aluminum can go through the process of creation through being recycled into a new product.)
- “The Three R’s - Reduce, Reuse, Recycle” by Nuria Roca. (How kids and families can avoid waste and be environmentally conscious.)
- “All the Way to the Ocean” by Joel Harper. (How kids can help keep the ocean clean.)
- “The Berenstain Bears Don’t Pollute (Anymore)” by Stan and Jan Berenstain. (Brother and Sister Berenstain Bear form an earth saver’s club to keep their environment safe.)
- “Pee Wee and the Magical Compost Heap,” “Pee Wee Goes to the Fair,” “Pee Wee’s Family,” and “Pee Wee’s Great Adventure” by Lorraine Roulston. (This series of books focuses on Pee Wee, a red wiggler worm, and his adventures in composting.)
- “Handful of Dirt” by Raymond Bial. (A real life look at dirt and how it is important to the earth.)
- “A Harvest of Color: Growing a Vegetable Garden” by Melanie Eclare.
- “Our Generous Garden” by Ann Nagro. (Elementary students grow a garden.)



Upper Elementary to Middle School

- “Gaia Girls Enter the Earth” and “Gaia Girls Way of Water” by Lee Welles. (A book series about the entity of the earth bestowing its powers on a girl and how she handles caring for the earth.)
- “The Eco Boys - Turn Tide” by Genia Stemper. (An adventure series of three seventh grade boys as they work to protect the environment.)
- “The Fire Bug Connection” by Jean Craighead George. (An ecological mystery.)
- “How We Know What We Know about Our Changing Climate” by Lynne Cherry and Gary Braagch. (Factual information about the earth and the changing climate.) ❖

GO GREEN ACTIVITIES

Reprinted with permission.

“Potpourri,” July 2010

It's easy to start living green and to involve children in recycling, reusing and reducing to help protect the environment.

Recycle: Check with your community's recycling office to learn the rules—you may need to sort plastic, glass, and paper recyclables. Sorting recyclables into the correct bins is a learning activity for children, and they can even carry the bins to the curb for pick-up.

Drink Tap Water: Did you know that much bottled water is actually tap water that has been filtered? Municipal water is monitored for safety, and it may be a good source of fluoride; plus, it is much cheaper than bottled water. So, fill reusable BPA-free bottles and keep them in the refrigerator for easy access. Or, fill bottles half full, freeze, then fill with tap water for an icy drink that stays cold.

Go Natural: Instead of buying commercial cleaning products, use ingredients from your

home. To deodorize carpeting, sprinkle with baking soda, wait 15 minutes, then vacuum. Use white vinegar to cut grease, remove mildew, and remove stains. For more tips, go to www.eartheasy/live_nontoxic_solutions.htm or to the article “Green Cleaning” on page 10.

Conserve Energy: Turn off lights when you leave a room, shut down the computer and turn off the television when they aren't in use, and keep the refrigerator and freezer doors open only as long as it takes to remove the food you need.

Use Your Energy: Keep the car in park and ride your bicycle or walk as much as possible, weather permitting. This not only reduces the number of cars on the road, it will save you money and provide opportunities for exercise while having fun. ❖

GARDENING WITH CHILDREN

Stephanie Reuter, 4-H Program Assistant
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Gardening is an educational and fun activity to do with children. Some of the benefits include the children being more likely to eat vegetables and to engage in physical activity and experience hands-on learning about science. Children of all ages can participate in gardening, and gardens can be grown almost anywhere.

If you are interested in growing a garden in the ground, it is recommended that you first test your soil to check for any contamination. This can be done for a nominal fee by contacting your local MSU Extension office. To get the garden started, you will need to cultivate the soil by loosening it with hand tools, such as a shovel or spade fork or by using a rototiller. After the ground has been cultivated, rake the soil flat and smooth and remove any weeds or debris.

You can start the plants from seeds or transplant seedlings that have already started growing. Some edible plants that are easy to start from seeds are beans, peas, cucumbers, and squash. Easy to grow flowers include zinnias, cosmos, sunflowers, and marigolds. Michigan has a shorter growing season, so some plants like peppers, tomatoes, cabbage, and broccoli are best if planted from transplants bought from a garden center. Follow the instructions on the seed package or plant label to determine how deep and far apart to place the seeds or plants. It is best to start your garden after Memorial Day.

To prevent weeds from taking over the garden, mulch around the plants with grass clippings or straw. Pull up any weeds that sprout so they won't deprive the garden plants of water, light and nutrients from the soil. Most plants require about one to two inches of water each week. It is better to add a lot of water once a

week (approximately 15 to 20 seconds with the hose), instead of tiny amounts of water several times a week. Within six to eight weeks, you will be able to start harvesting from the garden.

Most plants can be grown in containers if space is limited. You can also grow a garden in an area with little sun by selecting plants that do best in shade, such as lettuce and impatiens.

There are many educational activities that can be associated with gardening. Children can be taught how plants grow and visually see it happen as the garden flourishes. Older children can journal about what they see occurring in the garden. Children can learn about the different foods or flowers they are growing and the various tools that are used to maintain the garden. You can also help children learn the parts of a plant by associating them with body parts. Ask them what part of their body would be the roots (feet), stems (legs), leaves (hands), and flower (head). You can also get books from the library related to gardening and plants.

Once the plants can be harvested, have the children try the foods they have grown. They will be more likely to try a food when they helped create it. You can also have the children help prepare the foods before they are eaten.

Garden Snacks that Children Like

- Cucumber and cream cheese sandwiches: Spread cream cheese on bread and layer with cucumber slices.
- Garden salad: Wash fresh lettuce from the garden and mix with a variety of cut up vegetables. Serve with the child's favorite dressing.

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ARTS AND SCRAPS

A LOCAL ORGANIZATION'S COMMITMENT TO RECYCLING AND REUSING

Peg Upmeyer, Arts and Scraps Director
Detroit

Everyone knows that recycling is good, but what exactly are some of the benefits of this worthwhile practice?

Recycling:

- Reduces the need for landfills and incineration.
- Prevents pollution.
- Saves energy.
- Conserves natural resources such as timber, water and minerals.
- Helps sustain the environment for future generations.
- Provides learning and fun for children and adults.

Recycling for learning and fun is the mission of Arts & Scraps, a Detroit nonprofit organization. Yearly, this organization recycles 28 tons of industrial materials into learning and creative tools for preschool-age children and older.

Children can roll tennis balls down inclined planes constructed from gutter scraps, weave on a giant loom they can crawl inside, discover Michigan on a six-foot map, play a discarded xylophone, and many other activities that have been created out of recycled materials.

The programs that are offered at Arts and Scraps include a store with over 300 unique items and free project planning. To purchase items, a full grocery bag is only seven dollars; six dollars for nonprofit organizations and schools. There is also Scrap Junction with six interactive stations where adults and children play and learn together. The cost is three dollars per person, but if you visit your Detroit area library for a Museum Adventure Pass, four people enter for free. This is great for field trips.

The children attend Scrap Junction to create custom designed projects aimed at a theme; shopping is included. Student or adult/student workshops for children ages three and up provide an opportunity to create a project from nine curriculum themes. Instructors introduce a topic, challenge the students to solve a problem and the students create the project using individual kits. Complete kits to make a project can be purchased for one person, ten, twenty-five, or thirty-five.

This is also a great place for school-age programs to get involved in the community. School-age children and adults can volunteer to help prepare and stock materials, assemble kits and develop bulletin boards.

Arts and Scraps has several publications including, "Creating Fun with Stuff You Own," which features 48 ideas using materials commonly found around the house and hints on keeping creativity alive in children. "All About Me" is an activities journal for children of all ages to explore thoughts, moods and feelings. Finally, a DVD featuring six ten-minute segments on ideas for using materials at home is now available.

"The materials allow the kids to create art or projects that exist only in their imagination – it's the ultimate creative process." Materials that can be recycled are found in many different places and can be used in very creative ways. Provide a child with these items and he/she will make a creation that could only be thought of in a child's imagination.

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TURN OFF THE LIGHTS: PRACTICAL TIPS FOR SAVING ENERGY AND MONEY

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Saginaw County



In a home or center child care setting, many strategies can be utilized to lower operating costs and save energy. As we move into the era of going green, each of us are being encouraged to take a responsible role in this process. The tips listed are suggestions to help any individual become more energy-conscious and to teach children in child care settings to become energy-misers too!

In Any Weather

- Close the doors and registers in rooms infrequently used.
- Install a programmable thermostat to adjust temperatures automatically.
- Avoid rinsing dishes prior to putting them in the dishwasher. This practice could save up to \$70 a year.
- Keep the hot water temperature at 120 degrees or less.
- Wrap your electric hot water heater with an insulated blanket as this can reduce heat loss by 18 percent.
- Adjust the water level on your washing machine to match the load size, especially if using hot water. Cold water wash and rinse is effective for most items.
- Clean the lint filter on your dryer each time you use it.
- Use compact fluorescent bulbs where possible. These funny looking bulbs produce the same amount of light by using a quarter less electricity.
- Turn off bathroom and kitchen fans when not in use.
- Make sure registers are not blocked by furniture or drapes.
- Don't peek in the oven. Cooking temperatures can drop as much as 50 degrees every time the oven door is opened.

- Buy things that can be used over and over instead of disposable items.
- Drive sensibly—rapid acceleration and braking wastes gasoline. Keep tires properly inflated to save on gas.

In Warm Weather

- Clean or replace your air conditioner's filter every month to trim your cooling costs and help your unit run more efficiently.
- Turn off ceiling fans when you leave the room. A fan running constantly can cost up to \$7 a month, depending upon its size and age.
- Limit the time your pool pump runs to no more than six hours a day.
- If you have air conditioning, set your thermostat to 78 degrees. Raise the temperature to 82 degrees or warmer when you're away.
- Close curtains and blinds to keep the space cool and reduce the need to run fans and air conditioners.
- Shade exterior air conditioning units so they don't need to work as hard.
- Use ceiling fans to promote air movement and reduce the need for air conditioning.
- Close the fireplace damper—it can let cool air escape. It is like having a window open.
- Avoid leaving the refrigerator or freezer open for long periods of time.

In Cold Weather

- Wear warm clothing indoors.
- Set the thermostat to 68 degrees or lower in the evening, if possible.
- Replace or clean furnace filters monthly—dirty filters restrict air flow.
- Reduce drafts by partially closing drapes or blinds when possible. Open drapes or blinds when the sun is out.
- Seal leaks with caulk or weather stripping.

- Take a ribbon and hold it up to the edges of the doors and windows. If the ribbon blows, you've found a leak.
- Rearrange furniture so you are sitting near interior walls—exterior walls and windows are likely to be drafty.
- Close the fireplace damper when there is no fire burning. An open damper can let eight percent of heat from your furnace escape through the chimney.
- Make sure your ceiling fan is on the proper setting for the best winter warm air circulation.

Ways Kids Can Help

- Turn off the water while doing dishes, brushing teeth, etc.
- Turn off lights when leaving the room.
- Decide what you are looking for before opening the refrigerator or freezer.
- Turn off toys and games that use batteries when not playing with them. Batteries will last longer.
- Turn off plug-in electronic devices when done using them.
- Brainstorm ways to save energy. Put up a board where kids can write down their ideas.

Office and Home Electronic Tips

- Buy rechargeable batteries and a charger.
- Select energy-efficient equipment whenever possible. An *ENERGY STAR* labeled computer uses 70 percent less electricity than computers without this designation.
- Turn off the television when no one is watching it. The same goes for computers, printers, radios, and appliances. It is even more efficient to unplug these items when they are not in use. It is a misconception that equipment lasts longer if it is left on.
- If you are not able to turn your computer off, setting your computer to automatically switch to sleep mode or manually turning off the monitor is always the best strategy. Screen savers do not reduce energy use.

- Laptops, in general, use much less energy than desktop computers.
- If using a laptop, unplug the power cord or plug it into a power strip that can be turned off.
- Unplug battery chargers when not in use.

Visit www.energysavers.gov for more energy-saving ideas. ❖

Gardening with Children, from page 6

- Sautéed zucchini sprinkled with mozzarella: Sautee sliced zucchini in a pan with a tablespoon of olive oil and then sprinkle with shredded mozzarella.
- Fresh tomato salsa: Dice a variety of vegetables from the garden and serve with tortilla chips.

Additional Gardening Resources

- Gardening in Michigan - http://migarden.msu.edu/migarden/tip_sheets.
- Family Resource Room for gardening - www.kidsgardening.com/family.asp.
- Container gardening - www.kidsgardening.com/growingideas/PROJECTS/feb03/pg1.html.
- Children's gardening grants - www.kidsgardening.com/grants.asp. ❖

Arts and Scraps, from page 7

Arts and Scraps is an example of an organization that reuses materials for children's learning. Similar programs may be offered in other areas of the state. Check online or with your local library or school. For more information on Arts and Scraps, go to www.artsandscraps.org. ❖

GREEN CLEANING

Jessica Coates, Licensing Consultant
Eaton County

Homemade green cleaning products are becoming more popular as people learn about the harmful effects of chemical cleaners. Making green cleaning products:

- Ensures that dangerous chemicals aren't brought into the facility.
- Reduces the risk of accidental ingestion, either directly from the bottle or from residue left after cleaning.
- Reduces the amount of chemicals released into the water system.

Just under ten percent of all toxic exposures are caused by chemical-based cleaners. Asthma, skin irritations and cancer have also been linked to chemical cleaning product use. Green cleaning products are not only safe, they are just as effective as chemical cleaners.

Homemade green cleaning products also cost much less than commercial chemical cleaners. It is estimated that homemade cleaners cost a tenth of their chemical counterparts. So, if you now spend \$100 a year on cleaning supplies, you could only spend \$10 a year on homemade cleaning products. Another bonus is that many of the products you'll need for making homemade cleaning products are probably already in your home, and the products that you will need to buy will most likely last a long time.

Some of the supplies needed to make green cleaning products include: white vinegar, baking soda, water, olive oil, lemon juice, washing soda, and borax. Essential oils, such as lavender, lemongrass and rosemary, are nice to add for a pleasant aroma but are not required. Essential oils can be purchased at health food stores and some grocery stores in the health and beauty aisle. You will also need spray bottles and other containers for storing the cleaning products. Old shirts can be reused as cleaning rags.

White vinegar kills mold, bacteria and germs. A ¼ cup can be added to the washer's rinse cycle to act as a softener. You can also wipe it on utensils and cutting boards prior to washing to remove fish and onion odors.

Baking soda can not only be used to absorb odors in the refrigerator, it is a great soft scouring powder. Make a paste with water and rub it on countertops, tubs and sinks. The paste can also be used to rub black heel marks off the floor. Add a ¼ cup of it to your wash to remove grease and freshen clothes, and it will also soften the water so less laundry soap needs to be used. Plastic storage containers can be deodorized by soaking them overnight in warm water and baking soda. When used on a damp sponge, baking soda can also be used to remove ink, pencil, crayon, or marker spots on painted walls.

There are also other products that can be used for green cleaning. Cooking oil is great for removing pasta stains off highchairs and plastic dishes. Club soda works great as a stain fighter on carpets and rugs.

Recipes for Green Cleaning Products

- Furniture polish: Combine a ¼ cup of lemon juice with a ½ cup of olive oil in a small container. Mix well. To use, dab a cloth in the mixture and wipe on wood surfaces. Store leftover mixture in the refrigerator. It is best to make a small amount of this product because it needs to be discarded after a month.
- Window/glass cleaner: Mix ½ cup of white vinegar with one gallon of water in a spray bottle. It is best not to wash windows when

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NATURE PRESCHOOL IN A GREEN BUILDING

Rachel Larimore, Director of Education
Chippewa Nature Center

Nature Preschool is a nature-based preschool operated by Chippewa Nature Center in Midland. The 2009-10 school year was an exciting one for us as we moved into our brand new LEED-designed (Leadership in Energy and Environmental Design) green building. The design elements range in technology and scale. As a result, there is a mix of simple, common sense solutions and cutting edge technology to create a building that is energy efficient as well a great teaching facility.

We enjoyed a cozy winter by heating with geothermal technology with a radiant floor. Sixteen geothermal wells extend 135 feet below ground, absorbing heat from the ground in the winter. Fluid circulates through a loop and is then pumped to a heat exchanger. There, an electrically driven compressor and heat exchanger concentrate the Earth's energy and release it as heat into our radiant floor, heating the building. The concrete floor of the preschool has nearly a mile of tubing. The heat exchanger doesn't create heat by burning fuel, like a furnace does, so we're using less fossil fuel than we would with a traditional system. This system means the heat is radiated through the space where the children are actually playing—the lower portion of the room. We went an entire winter without ever hearing a child or staff member say they were cold!

In mid-September, 48 individual solar panels were installed on the south roof of the preschool, and we started producing electricity from the sun, offsetting our use of power from the local grid. The installation of this 10 kilowatt system was made possible by a grant from the Michigan

Energy Office. When operating at full efficiency on a sunny summer day, a 10 kilowatt system should produce more than enough electricity to operate an average sized home. In the winter, efficiency will decrease as the sun's angle drops, but we still produce power. From September 18 to October 31, we produced a total of 849 kilowatt hours of electricity from the sun with our biggest single production day being 40.99 kilowatt hours.



The most talked about exterior features of the building are the rain barrels and the rain chains that direct the rain from the gutters into the barrels. We currently have six 75-gallon rain barrels around the perimeter of the preschool. The barrels can hold up to 450 gallons of water and the kids use that water for all types outdoor play experiences—think mudpies and homemade lakes, rivers and waterfalls! By collecting and using this water for play and irrigation, we are conserving resources by not turning on the tap. From an early childhood perspective, rain barrels may have been our best investment when it came to the new building. The children actually get mad if there isn't any rain in the barrels. From there, teachers lead the discussion that someone used all the water from the last time it rained, and they will have to wait until it rains to have more water—an age-appropriate, relevant conservation lesson!

Another key green feature is the use of natural lighting throughout the building which reduces the need for lights and thus reduces our energy consumption. The teachers regularly comment that they love teaching in a building that is

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BRINGING THE OUTSIDE IN

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Eaton County

Children learn through direct, hands-on experiences with people, objects, events, and ideas. Natural elements provide for open-ended play that emphasizes unstructured creative exploration with diverse materials. Through children's handling, manipulation and physical interaction with materials and the natural environment, they learn the rules and principles that make the world operate. Adults typically see nature as background for what they are doing. Children experience nature, not as background for events, but as an experiential component of their activities. Nature for a child is a total sensory experience.

Children judge the natural setting not by its aesthetics, but rather by how they can interact with the environment. Shells and stones have endless uses in a classroom such as counting, sorting, classifying, stacking, carrying, tracing, and painting. Logs and large rocks can be used for chairs in the dramatic play area or explored with magnifying glasses. Sticks and rocks can be used in the block area to enhance building.

Plants can stimulate discovery, dramatic play and imagination. Plants speak to all of the senses. Plants in a pleasant environment with a mix of sun, shade, color, texture, and fragrance also encourage a sense of peacefulness. A large tree limb can be used as a tree in the classroom. The children could decorate it with art according to the seasons.

Terrariums are great for the classroom because children will learn about different environments and life cycles for plants and animals. Children can also participate in the creation of a terrarium. Examples of terrariums for children are caterpillar, roly-poly and plant terrariums.

What you need to build a soda bottle terrarium:



- One 2-liter soda bottle (with cap).
- Potting soil.
- Small stones or pebbles.
- Scissors.
- Seedlings.

Directions:

- Draw a line around the bottle about six inches up.
- Cut the bottle along the line with a pair of scissors.
- Place a handful of stones in the bottom half of the bottle—about one to two inches.
- Place soil on top of the stones.
- Plant seeds or seedlings.
- Water the terrarium before placing the top on.

When creating a roly-poly or caterpillar terrarium, use a plastic hamster cage and add about two to three inches of soil. Plants must be added for the roly-polies or caterpillars to eat. Roly-polies like to have places to hide so add rocks, sticks, pieces of wood and even decorative brick chips. The children can watch roly-poly's shed their shell, a mother roly-poly carry her egg sac on her lower belly and the eggs hatch. With a caterpillar terrarium, the children can watch the caterpillar build a cocoon and metamorphose into a butterfly.

Benefits of experimenting with nature:

- Increased concern for the environment.
- Increased sense of wonder and imagination.
- Increased development of the senses.
- Improved ability to concentrate.

- Improved awareness, reasoning and observation skills.
- Improved personal skills including confidence, social skills and self value.
- Increased problem-solving and critical thinking skills.
- Reduced stress and greater ability to deal with adversity.

The amount of time spent outside each day varies greatly with the ever changing weather patterns in Michigan. Teachers and providers need to be creative and bring natural objects into every learning center in the classroom. Experimentation and hands-on science and nature activities help build a child's understanding of the world. ❖

Green Cleaning, from page 10

it is hot and sunny because the cleaner will streak as it dries. Reuse your old newspaper by using it to wipe your windows instead of using a cleaning cloth.

- Carpet and rug deodorizer: Sprinkle baking soda over the area. Let stand 15-30 minutes before vacuuming.
- Drain cleaner: Pour a cup of baking soda and a cup of white vinegar down the drain. Let it sit for a few minutes while it bubbles. Flush out the solution with a teapot full of boiling water. Only use on metal pipes.
- Toilet bowl cleaner: Mix $\frac{1}{4}$ cup of baking soda and 1 cup of white vinegar in the basin of the toilet. Let it set for a few minutes, then scrub and flush.
- All-purpose cleaner: Mix $\frac{1}{2}$ cup of white vinegar, $\frac{1}{4}$ cup of baking soda and $\frac{1}{2}$ gallon of water in a spray bottle. This cleaner can be used for cleaning counters, stoves, microwaves, bathrooms, etc. This product can be used for cleaning but not for sanitizing.

- Laundry soap: Grate Fels Naptha laundry soap with a grater or use a food processor. Approximately $\frac{2}{3}$ of a bar of soap will make 1 cup of grated soap. Mix 1 cup of grated Fels Naptha laundry soap, $\frac{1}{2}$ cup borax, $\frac{1}{2}$ cup washing soda. One tablespoon of detergent is sufficient per load of wash. If you have a high-efficiency machine, you might want to experiment with using a little less detergent for normal loads. If your clothes come out feeling stiff, lower the amount of detergent. For clothes that are heavily soiled, add a teaspoon more of the detergent.
- Dishwasher soap: Mix 1 tablespoon borax and 1 tablespoon baking soda for each dishwasher load. Mix equal parts borax and baking soda and store in a container. Add 2 tablespoons per load.

Making homemade cleaning products is not only a healthy choice for the people in your home and your children in care, but it also makes cents. Once you give green cleaning products a try, you may want to try making other things homemade as well. There are lots of resources online for other green cleaners, as well as recipes for personal care products, dog treats, art and craft mixtures, and more. ❖

Nature Preschool in a Green Building, from page 11

primarily lit by the sun and that the classrooms require no additional lighting on sunny days. The teachers are able to light certain areas for reading a story or cooking in the kitchen, allowing a calm atmosphere for the rest of the classroom. This has its benefits for the teachers in that it promotes quiet, calm behavior inside.

One final green feature to mention is the dual-flush toilets. These have been a learning experience for the children and a water saver for the Nature Center. All of the toilets in the preschool have a dual-flush option so less

water is used when flushing liquid waste. The reduced flush option saves about 30 percent of water volume when compared to a standard flush. For the children, it's a matter of having to remember if they flush up or down. The students have mastered the concept and, as you might imagine, are happy to teach any adult that needs to use the restroom.

Nature Preschool is much more than a building—it's about helping children build a lifelong connection to nature. Having a green building is a key component in helping us meet this vision. For more information about Nature Preschool, visit www.chippewanaturecenter.org. ❖

What is the T.E.A.C.H. Early Childhood® MICHIGAN scholarship program?

- T.E.A.C.H. Early Childhood MICHIGAN is a statewide scholarship program designed to help child care center directors, teachers, assistants and owners, and family and group home child care providers attend school and achieve professional development goals.
- There are five different scholarship types available: Building Foundations, Child Development Associate (CDA) Assessment, part-time Associate's Degree, Associate's Degree (or CDA Training) and Bachelor's Degree.

Who is eligible to receive a T.E.A.C.H. scholarship?

- The scholarship program covers those employed at least 20 hours per week in licensed or registered early childhood programs.
- Recipients must earn less than \$14.25 per hour as a group home provider or center teacher, and less than \$15 an hour as a family home provider, group home owner, or center director.

What's covered by a T.E.A.C.H. scholarship?

- A recipient can take just one class, or work toward a CDA credential, an Associate's Degree or Bachelor's Degree.
- The scholarship covers a majority of the cost of books, tuition, fees, and also compensates for leave time from work.

What makes this program a stand-out among scholarships?

- One-to-one counseling is a vital component of the scholarship program, which boasts an exceptional 85 percent completion rate!

Great! Who do I call?

- Call T.E.A.C.H. Early Childhood® MICHIGAN, **(866) 648-3224, ext. 312**, for eligibility requirements and to request an application, or read more at the Michigan Association for the Education of Young Children website, www.miaeyc.org.



UPCOMING PROFESSIONAL DEVELOPMENT SEMINARS, CLASSES AND OTHER TRAINING OPPORTUNITIES

Michigan Association for Infant Mental Health Biennial Conference
 May 15-17, 2011
 Ann Arbor, Mich.
<http://www.mi-aimh.org/>
 (734) 785-7700

Star Power Rally
 May 19, 2011
 Capitol Lawn, Lansing, Mich.
www.ecic4kids.org

Michigan Healthy Mothers, Healty Babies 2011 Educational Conference
 June 2, 2011
 Lansing, Mich.
www.hmhbmi.org
kuharevk@mfc-health.org
ehrhardtj@michigan.gov

Early On® Annual Conference and Faculty Colloquium
 November 3-4, 2011
 Acme, Mich.
<http://eotta.ccesa.org>
 (866) 334-5437

A comprehensive list of conferences that are scheduled for 2011, including national conferences, can be found at:
[www.michigan.gov/documents/Early Childhood Conferences 2006 149277 7.pdf](http://www.michigan.gov/documents/Early_Childhood_Conferences_2006_149277_7.pdf).

Attention Child Care Centers

Transportation: Since December 8, 2010, the use of passenger vans with a rated seating capacity of 11 or more has been prohibited.

Attention Family and Group Home Providers

Changes have been made to the Child Care Organizations Act (1973 PA 116) that require:

- Criminal history checks on assistant caregivers prior to making an offer of employment.
- Establishing and maintaining a policy regarding supervision of volunteers.

See the Technical Assistance and Consultation Manual for rules 400.1903(5), 400.1904(1)(d) and 400.1906(1)(d) - (g) for more information on complying with these changes.

www.michigan.gov/michildcare-ta

ONGOING PROFESSIONAL DEVELOPMENT CLASSES

(Call organization for classes, dates and times.)

Great Start CONNECT, www.greatstartconnect.org, (877) 61GreatStart [(877) 614-7328] or (877) 81GSConnect [(877) 814-7266]

HighScope Training Opportunities, www.highscope.org, (734) 485-2000, ext. 234

DEPARTMENT OF HUMAN SERVICES
 BUREAU OF CHILDREN AND ADULT LICENSING
 7109 W. SAGINAW, 2ND FLOOR
 P.O. BOX 30650
 LANSING, MI 48909

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 Lansing, Michigan
 Permit No. 1200



CONSUMER PRODUCT SAFETY COMMISSION (CPSC) INFANT/CHILD PRODUCT RECALLS (not including toys)

These recalls have been added since Issue 89 of MCCM (January 2011). Details on these product recalls may be obtained on the CPSC's website at www.cpsc.gov.

- Cribs recalled by ducduc due to fall and entrapment hazards.
- Pampers® Natural Stages Pacifiers recalled by Key Baby due to choking hazard.
- Second infant death prompts re-announcement of Delta Enterprise Safety Peg drop-Side crib recall to repair.
- AOSOM recalls wooden playpens due to choking and laceration hazards.
- Baby Jogger LLC recalls baby jogger jump seats due to fall hazard.
- Jogging strollers recalled by B.O.B. Trailers due to strangulation hazard.
- IKEA recalls to repair cribs due to entrapment and suffocation hazards.
- Kristi G. Company and SwimWays Corporation recall child chairs due to fall hazard.
- Bassinets recalled by Burlington Basket Company due to fall hazard.
- Two strangulation deaths prompt Summer Infant to recall video baby monitors with cords.
- Rechargeable batteries in video baby monitors recalled to replace by Summer Infant due to burn hazard; sold exclusively at Babies R Us.
- Escalade Sports recalls Oasis Playsets due to fall hazard.
- Generation 2 Worldwide SafetyCraft brand drop-side cribs pose risks of strangulation, suffocation; hardware linked to deaths and injuries.
- Sassy Inc. recalls Refreshing Rings infant teething/rattles due to an ingestion hazard.
- The Land of Nod recalls Status Furniture Rosebud drop-side cribs due to entrapment, suffocation and fall hazards.
- Strollers recalled to repair by phil&teds USA due to amputation and laceration hazards.
- Teething rings recalled by Calisson due to ingestion hazard.
- The First Years® recalls American Red Cross® cabinet swing locks; latches can fail.

Copies Printed: 14,100
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 Authority: DHS Director



STATE OF MICHIGAN
 Department of Human Services

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