

Muddy Hands

Soil and Water Information for Educators Brought to You by the Lake and Geauga County Soil and Water Conservation Districts



Nature Deficit Disorder

What is nature deficit disorder? According to journalist and author of The Last Child in the Woods-Saving our Children From Nature Deficit Disorder, Richard Louv "It's the cumulative effect of withdrawing nature from children's experiences, but not just individual children. Families too can show the symptoms; increased feelings of stress, trouble paying attention, feelings of not being rooted in the world."

Research has shown that children ages 6 to 12 spend an average of 4 hours a day with media related activities: TV, video games and computer screens. This is compared to the average of 1 to 2 hours of outside or "free" playtime. Our children are suffering from the lack of outdoor stimulus. In our society there has been a rise in childhood obesity, depression and Attention Deficit Hyperactive Disorder (ADHD). A recent study conducted by the University of Illinois at Urbana-Champaign found that kids with ADHD should spend some quality after school hours and weekend time outdoors enjoying nature. The payoff for this "treatment" of children 5 to 18 years old, who participated in the study, was a significant reduction of symptoms.

The challenge is that parents and teachers today have the media and their own natural fears of strangers, health concerns of West Nile virus, and the lack of neighborhood green space competing with the opportunity for children to grow and experience nature as we once did.

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Experiencing Education

In a school environment, experiential education is often defined as guiding a student towards discovery of information. This is in contrast to a classroom where the teacher gives the information to the students and expects the students to recite the facts back verbatim (didactic education). If two classes are learning about bluebirds, the experiential classroom will try to create a bluebird habitat in the schoolyard. The didactic classroom will create researched presentations on bluebird habitat.

It is easy to jump to conclusions on which form of education is better, but keep in mind that the answer changes for each individual learner. One child might be so distracted by all the possibilities of experience that he is soon overwhelmed without strong guidance. (This is probably the same student that aces every spelling test and always has his homework done.) Another child might be stifled by the guidelines of a report assignment because he'd rather write a skit about a topic than a formal report. (This is the student with great ideas, who's grades suffer because he can never remember to double space or capitalize.)

In today's schools, it can be difficult to incorporate outdoor experiences into the curriculum. Teachers have to balance pressures from the district to meet state

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"If facts are the seeds that later produce knowledge and wisdom, then the emotions and the impressions of the senses are the fertile soil in which the seeds must grow. The years of early childhood are the time to prepare the soil."

- Rachel Carson

Bumper sticker wisdom:

Learning is not the filling of a pail, but the lighting of a fire



Experiencing Education (Continued from page 1)

standards, students with multiple learning styles and many expectations, and the attitudes of parents and coworkers to even be able to contemplate experiential learning. But it is important, especially to those students who learn best by doing something. Here are some tips for successful (meaningful, safe, and fun) outdoor experiences.

Safety - Before heading out, encourage students to discuss fears associated with being outside. Let them voice concerns about bugs, snakes, and bee stings. Arm them with a 'game plan' for unplanned encounters. Most people are less afraid once they have voiced their concerns. It is also important to set boundaries and safety systems before you venture outside. Let the class know that certain areas are off limits. You should also have a loud, well-understood way of telling the students that they need to come to a certain place immediately. The same methods will also reassure a tentative principal.

Time efficiency - It is common to think that going outside wastes time and decreases efficiency. The first few times it might. Think about scheduling your day so that the kids are already dressed for the outdoors when it is time to go out for class. Make it clear to them that the classroom rules still apply when it comes to staying on task, raising hands, etc. They will learn that outdoor classes are just like indoor classes.

Behavior and misbehavior - Standards of behavior

should not change outside of the walls. You may need to add rules for safety. Many students equate 'outside' with recess, and it is tempting for some adults to do the same. Resist the temptation. It may be helpful to define a classroom area the first few times you take the class outside. This can be done with a large blanket, a ring of brightly colored yarn, or by using schoolyard landmarks.

Meeting standards - Remember that experiential education is about direct experience of a phenomenon. Take some time to observe your school's surroundings with the standards fresh in your mind. If you are teaching about erosion and runoff, find places where it is happening. Ready yourself for a rainy day observation. You could make the standards your students should know into a scavenger hunt and have them look for matches. If they can find evidence of erosion in the playground, then they understand erosion.

Weather and other outside forces - You've planned your outdoor lesson plan, gathered your supplies, and received permission from your principal. Now it is overcast, blustery, and chilly. Most people don't like to go out in bad weather, but it can actually lead to a more meaningful learning experience. Collect leftover clothes from the lost-and-found for kids who forgot coats, boots, hats, etc. Your excitement can be contagious. Button up the coats and head out into the drizzle. Study the runoff. See what the animals are doing in the rain. Enjoy it!

Nature Deficit Disorder (Continued from page 1)

How many of you climbed trees as kids? Made forts in the woods? Were covered in mud from dawn till dusk? You used your mind and body to explore the wonders of the outside world! How many of you allow your children or students free time outside to explore, to find that teachable moment, to search in a one foot by one foot area of grass? Are we cheating them by not allowing them the same opportunities we had? Think for a moment why you enjoy the outdoors and what sparked your appreciation. Maybe it was a parent or a mentor that you were influenced by, or a place that was special to you that was destroyed when houses or condos were built. Whatever the situation was, it changed your feeling forever and you became a steward. What will happen if we are not creating future stewards? Who will care for our land...our future?

In 1980 Jimmy Carter signed the Alaska National Interest Lands Conservation Act. At the time it seemed permanent and that the Arctic National Wildlife Refuge would be protected and safe forever. As we see now, the land is not as safe as we once thought. We also see this in our own backyards; isolated wetlands are not exempt from development take over. Unfortunately, laws, policies, wetland designations, conservation easements, and riparian setbacks will only survive if they have someone fighting for and supporting them.

Don't let your child or student become the "Last Child in the Woods". Take them outside to explore, go on a field trip to a local park or nature center, develop an outdoor land lab, or give "safe" assignments to encourage students to explore their own backyards!

Grants for land lab development are available to Geauga county schools. Contact Geauga SWCD for more information



Outdoor Experiences

Here are some ideas to start with when you are planning to take the learning outside.

Scavenger Hunt - These can be any theme. Use your imagination or your students' vocabulary list. Try all adjectives (find something brown, something smooth, hairy, tiny, etc.) or all concepts (erosion, pinnate leaves, photosynthesis, etc.). You might also give them a list of things to find within a hula hoop set in the grass (signs of insects, dead plant material, 5 types of plants, etc.)

Litterbugs - A great recycling and litter awareness project to combine with insects and art. Have students gather litter and recyclable items from their home. Let the students use their litter collection to make a Litterbug. Make sure the insect has the appropriate body parts (6 legs, 3 body sections, wings, and so on). Have the class decide on an anti-littering slogan to accompany their litterbugs.

Tactile Field Trip - Blindfold students and lead them on a touching trip of their surroundings. Have them guess what they are feeling and then go back and find the objects with the blindfolds off.

Mad About Math - The playground is a great place for geometry and measuring. Younger students can identify shapes (the rectangle of the parking lot, the triangles that make up the swing set). Older students can pull out the ruler, tape measure, and protractor and figure out the area of the infield or the height of the building by counting bricks and multiplying by the height of a brick. Or introduce a metric unit by allowing each student to invent a unit of measurement and trying to determine conversion factors between the units.

Mapping - Even young students can learn to map a small area. Start simple, with a flowerbed or a cluster of trees. You might also cut out pieces of paper to represent objects. These pieces can be easily repositioned as needed. Older students can

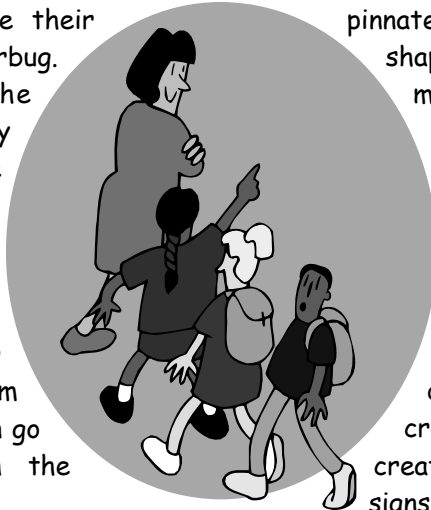
work with protractors and string to calculate exact angles and distances. For an added experience, bring a surveyor out to your school to demonstrate their equipment and techniques. Create a map of the classroom, or the neighborhood in the schoolyard. It could be as simple as chalk drawings or painted permanently onto the pavement.

Designs to Discover! - Give students a list of designs to discover! Leave them space to record other findings. Search for different types of spider webs, leaf structures and variations (palmate, parallel, pinnate, smooth, hairy, etc.), snowflake shapes (look at individual flakes with magnifying glasses), tracks in the snow or different pine needle and pine cone shapes. Younger students can be given simple shapes to find.

CSI-Critter Signs Investigated - Divide the class into groups of four or five. Send the groups to different areas of the schoolyard to create a "CSI Walk". Each group will create a map with locations marked where signs of wildlife can be found; scat, chew marks on trees, tracks, holes dug in grass or chewed nuts. Have the groups switch and each group will use another groups map to find what they discovered! See if they can add to the list!

Water Works - Take your students for a water works walk. Have them point out different locations water can be found. Follow the water. Where does it go? Discuss different forms of pollution that might enter the water. What can be done to protect our water? Back inside student can do further research on local pollution issues and what is being done to correct the problem.

Regardless of what you do, take your students outdoors with a purpose in mind. Something exciting is bound to happen.



Ohio Conservation Teacher of the Year



The purpose of this contest is to recognize the outstanding conservation education efforts of Ohio's Teachers. Teachers in grades K-6 and grades 7-12 will be recognized in two separate categories. Details about the contest can be found on the Lake and Geauga SWCD websites listed below or by contacting the District offices. Call 440-350-2730 (Lake SWCD) or 440-834-1122 (Gauga SWCD) for contest guidelines and application information. There will be a local prize offered at the county level, and the winners of each category will move on to the state competition. Let's recognize our outstanding Lake and Geauga County teachers by nominating them today!

Geauga SWCD Joins RAISE



The Regional Alliance for Informal Science Education, is an alliance of 19 organizations of informal science providers (science centers, nature centers, Soil and Water Conservation Districts and museums) in Northeast Ohio. It was created to provide a vehicle for its member organizations to coordinate their collective education resources in order to advance the teaching and learning of science and to promote science literacy within the community at large. Its goal is to make a difference in the way science is taught, presented, and learned. For more information click onto <http://www.RaiseOhio.org>.

Wanted: Education Specialist Volunteer

Join the team at Geauga SWCD and assist and present conservation education programs to local Geauga county schools. Get your feet wet doing Stream Quality Monitoring in local streams and rivers! For more information contact Geauga SWCD at 440-834-1122.

Thank you to the Western Reserve Federation of Conservationists for sponsoring Muddy Hands and conservation education in Northeast Ohio

Your SWCD Contacts:

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Getting Students Involved in Conservation

Once again, Lake and Geauga County SWCDs are sponsoring a Conservation Poster Contest. The contest is held in conjunction with the National Association of Conservation Districts, the Ohio Federation of Soil & Water Conservation Districts and Ohio Department of Natural Resources Division of Soil and Water Conservation. "Water Wise" is the theme for Soil and Water Stewardship Week April 30 through May 7, 2006. The purpose of the contest is to instill in our youth an appreciation for the environment and the need to protect our precious soil and water resources. Lake and Geauga County schools must submit posters to their District office on or before April 28, 2006, or call their local SWCD office by April 17, 2006 to arrange for the District to collect them by the deadline. Judges will consider neatness, choice of color, and adherence to the rules.



Prizes will be awarded for local 1st and 2nd place winners! All posters become the property of Lake or Geauga SWCDs, unless otherwise requested. Please call your SWCD or visit their website!

Further Outdoor and Experiential Education Resources

Books:

The Thunder Tree, by Robert Michael Pyle
The Last Child in the Woods-Saving our Children From Nature Deficit Disorder, by Richard Louv
The Geography of Childhood, by Stephen Trimble
Natural Learning: The Life History of an Environmental Schoolyard, by Robin Moore
Experience and Education, by John Dewey

Web Sites:

Association for Experiential Education:
<http://www.aee.org/customer/pages.php?pageid=47>
Wilderdom Project:
<http://www.wilderdom.com/experiential/>
ERIC digest on Experiential Education:
<http://www.ericdigests.org/1992-3/changing.htm>