The tree-canopied trail that begins in our backyard and winds through the aspen and spruce forest beckoned us to come exploring early one afternoon. Our three children (ages 5, 6, and 8) had endured a long church service and were eager to get outdoors. After a hurried lunch, we started out, with 5-year-old Joshua leading the way.

The chatter quickly ebbed away as each child became engrossed in exploring nature up close. When Joshua kicked a puff-ball, the tiny brown spores rose in a cloud around his feet. He had already found a stick (good for poking into holes and puddles) and had stuffed a chunk of moss into his pocket. Emily was also on a treasure hunt, looking for interesting things that Jesus had made. “Do you think we’ll find buttercups?” she asked.

Leaving the woods, we began crossing the hay meadow. Joshua stuck his stick into the grassy winter tunnels of meadow voles. “What are these scratch marks?” Emily asked, pointing to freshly scraped earth around a number of the holes.

I asked her, “What animal do you think might be scratching around the mouse holes?”

“A cougar,” Samuel said, nodding with assurance.

We all laughed, knowing how unlikely that might be. The laughing stopped suddenly, though, as we crested a small rise and saw the scratcher just ahead of us. A skunk, long black and white hair cascading over its sides and back, continued its scratching without noticing us. We watched silently for a moment. Then Emily whispered, “Let’s thank Jesus for the skunk.”

Exploring creation draws spontaneous praise and wonder from children and adults alike. But spending time with children in nature is not just for family weekends and holidays. Not only is the study of creation a worthy spiritual exercise, but it is also a powerful sensory and intellectual stimulus. Teachers frequently complain that children are apathetic and unmotivated. Speakers are paid thousands of dollars to come to teachers’ conventions and share tips on how to engage children in learning. Trying to present facts in a palatable way to our technologically saturated young children has turned into a huge industry, known as “edutainment.”

But is this what young people need—learning tools that seek to compete with entertainment technology? How do you compete with the media and technology for children’s attention, anyway?

I’m not convinced that all these technologically advanced methods of presenting material to children are the answer. There’s a better way.

Nature’s Low-Tech Answer to Attention Deficit

Frances Kuo, director of University of Illinois’ Landscape and Human Health Laboratory, conducted research in Chicago’s public housing projects where 60 percent of residents were children 14 and under, to study the effects of nature on the children’s psychological functioning.1 Kuo hypothesized that attentional fatigue has implications for all kinds of psychological processes that require effort. Concentrating takes effort, but so does self-control and delayed gratification. In following up on this assumption, she and her associates found that children aged 7 to 12 who merely had greener apartment views did better on objective measures of impulse control and delayed gratification.

Kuo and her team next studied the effects of nature on children who’d been diagnosed with Attention Deficit Hyperactivity Disorder (ADHD).2 “We took them on a forced march through the park,” Kuo says, “then measured their concentration after each walk.” She found that “children with ADHD can concentrate better after doing an activity, a relatively green activity, versus not.”
In fact, results of the controlled studies were impressive. The measured differences in children's ability to concentrate after walking in a green space or walking outdoors in a not-green space were not only significant, but large. “Actually, kind of shockingly large differences” were found, Kuo says. “The nature effect is a big one.”

**Bringing Nature to School**

Recognizing that many children don’t have access to natural spaces, some schools and organizations have taken the initiative to bring the benefits of “green” to the classroom. In Canada, Evergreen, a charitable organization that supports efforts to create and sustain natural outdoor spaces, encourages school boards to naturalize areas around schools, in order to exploit the potential for improving students’ learning ability and behavior. “From a real estate perspective,” says Cam Collyer, director of Evergreen’s Learning Grounds Program, “our school grounds are a huge part of our educational infrastructure, and yet they’re not treated as such or even looked upon or designed consciously as a part of the educational asset that we have.”3 Developing the space around schools as learning areas makes good sense, according to Collyer. “You can expand the reach of what you can do inside the classroom, and of course, the beauty of it is, they’re close. This isn’t a field trip. It doesn’t need a waiver.”

When gardens and naturalized play areas are integrated into a school’s curriculum, teachers report improvements in a number of different areas, including student attitudes about learning. “We find that in our research, 90 percent of respondents said that student enthusiasm for learning was increased when they were using the school ground for learning,” says Collyer, adding, “It turns kids on—the multisensory environment, the hands-on learning environment. These are powerful things.”

**Outdoor Classrooms for Multisensory Input**

When schools embrace the concept of greening the school grounds, teachers can use “outdoor classrooms” for hands-on learning where children work with experienced community volunteers of all ages to conduct experiments, gather information, and nurture living things. Students who may never have had the opportunity to grow a garden learn firsthand the joys of producing food they can enjoy.

Book learning and technology can only accomplish so much in nature education because the learning is generally two-dimensional. Nature videos and DVDs are helpful, but they’re not the real thing. In nature, children employ all their senses to learn about the environment around them. Their natural curiosity is stimulated. They ask questions. They begin to want to know more.

A walk in the park isn’t just for weekends and family holidays. Today more than ever, children need many opportunities to experience the wonders of creation. And while liability issues may limit teachers from regularly exposing students to natural settings that require field trips, a growing number of teachers has discovered the benefits of bringing the “green” to school by planting gardens and naturalizing school yards. They and their students are reaping the many benefits that nature can bring.
Here are some ways to make nature a regular part of your school program.

1. Grow an outdoor classroom. In Canada, resources for a greener school yard can be found at http://www.evergreen.ca.
2. Take students on a walk to learn about the bugs, birds, trees, and wildflowers near your school. Have them write, read and talk about, measure, and illustrate their experiences.
3. Sow some seeds: Plant trees, create a butterfly garden, and grow tomato plants or pumpkins. Tip: The best seeds for small hands are large ones (sunflowers, beans, and pumpkins). Beans are especially nice because they grow quickly, come in a variety of patterns and colors (my favorite: the Orca bean, which looks a lot like an orca whale), and can be used in a variety of recipes when harvested.
4. Plant a house. Cordon off a small area of the playground or lawn around your school and try the sunflower house described in Richard Louv’s Last Child in the Woods: Saving Our Children From Nature-Deficit Disorder (Kindle Paperback Edition, $9.95 on Amazon.com), page 173.
5. Invite a naturalist to your classroom.

Get Connected With Nature!

Some sites to help you connect to organizations that are involved in nature-based projects:

1. Evergreen (http://www.evergreen.ca) is an innovative charity that builds the relationship between nature, culture, and community in urban spaces. This site has information about Evergreen’s programs, volunteer opportunities, educational resources, native plant database, and discussion forum, plus many other resources.
2. Global, Environmental, and Outdoor Education Council (http://www.geoec.org). Lots of information for teachers including ready-to-use lesson plans.

Field Guides for Children

Lone Pine (http://www.lonepinepublishing.com) puts out regional guides with large, colorful pictures and good descriptions.

National Audubon Society’s First Field Guides—for ages 8 and up. Published by Scholastic (http://www.scholastic.com).

Golden Guides, cover most common species. Published by St. Martin’s Press (http://www.stmartins.com).

Fandex Family Field Guides (http://www.workman.com)—quick, fun-to-use resources with pages that open fan-style and are die cut in species shapes.