Nature as a Classroom

How to Start Teaching Students Outdoors
APRIL 2015

Author: David Suzuki Foundation

Graphic design / layout: Laura Lefurgey-Smith

Thank you to the following for contributing their knowledge and ideas through our Nature as a Classroom workshops:
Anita Georgy and the staff of the Stanley Park Ecology Society
Andrew McMartin
Bonnie Anderson
Torie Gervais
Jess Clausen

Special thanks to the following for their generous support of our education work:
G. Raymond Chang and family
JoAnne and Malcolm Bersohn
Jenny Guibert
Sitka Foundation
Arcangelo Rea Family Foundation
Nature’s Path EnviroKidz
Julie Glover
Great-West Life, London Life and Canada Life

ISBN Print = 978-1-897375-86-0
ISBN Digital = 978-1-897375-87-7
Over the past few years, the David Suzuki Foundation has been working to connect teachers with nature and help them pass on the connection to their students. Our Nature as a Classroom workshops in Ontario and B.C. have brought together teachers of Kindergarten through Grade 8, many of whom had never taught outdoors and felt daunted by the prospect.

Each workshop was nothing short of inspiring — for educators and DSF staff. Educators shared knowledge, stories and strategies, and brainstormed ways to deal with barriers such as lack of time and administrative support. Supported by a like-minded community, they felt empowered to do what they knew intuitively would benefit their students and themselves. Most began to incorporate nature time into their daily school schedules.

We wish all teachers could have similar experiences to refresh and inspire. But since we can only host a limited number of workshops, we decided to compile some of the ideas, advice and lessons from these sessions to get the word out to a wider audience.

While this primer is by no means an exhaustive guide to teaching outdoors (we list several in the Resource section), it offers basic ideas and inspiration on how to get started getting outside and cultivating a nature habit for yourself and your students.

We guarantee you won’t regret it.

See you out there!

The David Suzuki Foundation
why teach outdoors?

A large and ever-growing body of research documents the myriad reasons to take students outdoors as often as possible. Here’s just a short list of benefits to getting students (and teachers) into nature, whether it’s a nearby park, conservation area or your schoolyard:

- Time spent in nature enhances academic achievement
- Nature-based activities improve student behaviour and co-operation skills
- Outdoor learning promotes good communication
- Time outside helps students focus
- Students are happier, less stressed and physically healthier outdoors
- Time in nature has been shown to reduce some ADHD symptoms
- Spending time in nature helps with recall and memory, problem-solving and creativity
- If we want our children to protect the Earth, we need to give them an appreciation for it and a sense that they are connected to it

Note: These could be useful when communicating your get-outside plan to parents and administration.

What about educators?

So far, only a few studies have focused on the benefits of green time for teachers, but those indicate that teaching in nature has great effects. A study out of the U.K.’s King’s College London suggests teaching outdoors makes educators more confident and enthusiastic about their work, and more innovative in their teaching strategies. By extension, schools benefit from the leadership and influence of their teachers who take students outside.

Sources:
http://childrenandnature.ning.com/group/naturalteachers/forum/topics/10-reasons-to-take-your-students-outside/
We've heard many teachers express concern that if they spend time outside, they won't be meeting curriculum requirements. The all-too-common attitude that students outdoors aren't really learning can also be a major barrier.

Taking a class outside isn't just about unstructured, recess-style play (although that's important too). All kinds of subjects can be taught outdoors without sacrificing curriculum requirements.

Here are just a few examples of subjects taught just as well (if not better) outside:

**Math**
Nature is packed with patterns! Study the Fibonacci sequence or examine a tree’s rings to determine its age.

**Music**
Construct percussion instruments with objects found outdoors, then hold an impromptu concert. Or get to know your local birds by their songs.

**Art**
Make over an unsightly schoolyard fence with student art. Or make Andy Goldsworthy-inspired masterpieces with found objects.

**Science**
The sky is truly the limit here! Study clouds, weather, kite-flying and shadows. Learn to identify local plants or delve into the inner workings of natural ecosystems.

**Language Arts**
Nature abounds with collective nouns, metaphors and story starters. Or simply try journal writing or an outdoor reading session.

Check out creativestarlearning.co.uk for innovative outdoor lesson ideas arranged by subject.
If there’s one take-home message we’ve gleaned from our workshops, it’s that success in teaching outdoors lies in being prepared. Having all your materials and support systems in place will make the transition from class to schoolyard or park far smoother. Here are a few ideas for advance planning:

1. **Gather a classroom get-outdoors kit**
   - Include basics like rain ponchos (garbage bags work too), carpet tiles to sit on, pencils and pencil crayons, first aid kits, clipboards, magnifying glasses and laminated scavenger hunt cards
   - Collect extra warm clothes like hats and mittens for students who forget them
   - Don’t worry about gathering everything to begin with — build your collection over time
   - Ask parents to contribute to the classroom kit in lieu of teacher gifts at holidays and year-end, or have students write to local businesses for donations
   - Pair up with another teacher and share a kit, or take on the initiative as a school
2. Have some important class conversations

Establish and discuss rules for outdoor learning together as a class. Post them on a wall and revisit them regularly.

One primary teacher worked with her class to come up with these rules:

- Stay together
- Stay inside boundaries
- Work as a team on tasks
- No picking, pulling or pocketing
- Listen for a signal
- Dress for the weather
3. Reach out to fellow teachers

When it comes to taking classes outside, support is key! Team up with fellow teachers for best results. You can share ideas and materials, and offer support.

- Once you have a handle on best practices for getting outside, engage colleagues through a professional development session
- Take advantage of education leadership days, offered by some school boards, in which teachers go to other classrooms and learn from colleagues

4. Enlist parents for support and volunteer roles

- At the beginning of the school year, send home a letter explaining your plan to get students outside and what it will entail
- Host a parent meeting to introduce your plan and get necessary forms signed
- Keep in touch with parents throughout the year — send photos or students’ writings about their outdoor experience
- Invite parents to take part in outdoor activities
Each of these activities to help you get started teaching outdoors can be adapted to different student age levels:

**Scavenger hunts**

There are so many ways to scavenge for nature’s treasures! Do an alphabet hunt, and have students find objects whose names start with each letter. Or hand out paint chips and challenge students to find objects whose colours match the chips. No matter what kind of scavenger hunt you choose, you’ll be getting to know your local green space intimately.

**Art with found objects**

Search for images of Andy Goldsworthy’s work online, then use it as inspiration. Have students create patterns and pictures with materials found in the schoolyard, then take a gallery walk to observe others’ creations. You could also take photos to display inside the school.
Energy burners

Many teachers swear by starting their outdoor sessions with an energy-burner. One of our favourites involves dividing the class into two teams, facing each other. Call out true or false trivia questions on a topic of your choice (nature-related, or a review of something learned in class). If the answer is true, Team A runs after Team B, and Team B tries to escape. Those captured join the opposite team, and students return for another question. Be sure to establish clear boundaries ahead of time.

Adopt-a-tree

As a class, explore the schoolyard or a nearby park and choose one tree. Have students observe its size, shape, colour, leaves and bark. Visit the tree regularly and observe how it changes over the year. Hold reading sessions under your tree, or have students write stories and poems about it.

Sit spots

The sit spot is a simple, elegant activity that works best when you do it regularly. Simply have students find a spot in the schoolyard or park, and sit quietly, observing what’s going on around them. Young children might only sit for a few minutes, while older students will be able to sit for 10 to 15. This is another great way to get to know nearby nature intimately, and to notice changes you might otherwise miss.
Taking classes outdoors isn’t always easy, but barriers are surmountable with careful planning and a little creativity. Here are some of the most common perceived barriers and potential solutions:

**Cold weather**
Solutions:
- Keep a box of extra clothes in the classroom
- Prepare the class ahead of time for weather
- Survey the outdoor space ahead of time and find protected spaces

**Lack of adult supervisors**
Solutions:
- Bring along partner teachers, parents or teaching students who want experience
- Host a parent meeting at the beginning of the year to recruit help

**Lack of time**
Solutions:
- Make going outside part of your class’s regular routine — the more often you do it, the less time it will take to get out there
- Partner with other teachers — take two classes outside and spend twice as much time there
- Go straight from recess into an outside class so as not to waste time coming back indoors
- Use walking time to your destination as part of the lesson
Fear and reluctance from parents
Solutions:
• Involve parents — inform them at a parent-teacher night
• Use video/photo evidence of students learning outdoors
• Host a school Nature Night, similar to a Literacy Night but showcasing your time spent outdoors and how it benefits students
• Host a Welcome to Kindergarten event (or similar event for older grades) outside
• Use school social media channels to keep parents informed, and post photos and videos of students learning outdoors (with permission, of course)

Perception that going outside is just playing, not teaching
Solutions:
• Send your principal a summary of your plans and the reasoning behind them, in case they receive questions from parents
• Send a letter describing the benefits of outdoor learning (several teacher resource guides include sample letters)
• Have students write about their time spent outdoors and send these to parents, with photographs
• Invite parents to take part

Lack of materials
Solutions:
• Use what’s already out there — trees, leaves, sun and shadows
• Build your classroom get-outside kit (see page 20) over time with donations from parents and local businesses
RESOURCES

When you’re ready to take your classroom nature habit to the next level, there many excellent resources to help you. This is just a sampling:

**Educational guides and lesson plans**

*Connecting With Nature* educational guides (David Suzuki Foundation — download for free at getbackoutside.ca)

30 x 30 Nature Challenge for Schools (David Suzuki Foundation — check out 30x30.davidsuzuki.org)

*Into Nature* (Back to Nature Network)

*Natural Curiosity: A Resource for Teachers* (Ontario Institute for Studies in Education)

*Project WILD* and *Project WET* resource guides (available through their workshops)

Get Outdoors (WildBC)

Learning for Sustainable Futures newsletters and Connecting the Dots resource

Canadian Wildlife Federation lesson plans and resources

Children & Nature Network resources

**Background reading**

*Coyote’s Guide to Connecting with Nature* by Jon Young, Ellen Haas and Evan McGown

*Last Child in the Woods* by Rich Louv

*Your Brain on Nature* by Eva M. Selhub and Alan C. Logan

Acorn Naturalists is a supply company with an extensive catalogue of outdoor education materials. Check out acornnaturalists.com.