

Outdoor Learning Initiatives

Across School District 72

Background

Schools and educators have embraced the idea of learning outside for some time now, but this year, with the added incentive of COVID-19, there is greater interest, consideration and creativity in finding ways to move beyond the traditional classroom to connect lessons and engage students with the outdoors.

COVID is increasing the pace of the shift towards trying to take better advantage of the outdoors as outdoor learning provides better opportunities for physical distancing, while offering a broad range of physical and mental health benefits for both students and teachers.

The Board of Education had requested a report on the current outdoor learning initiatives across the district so that the board could consider next steps on sustainable support to broaden outdoor learning.



To prepare this report, we emailed school principals to compile a list of any outdoor education and outdoor learning initiatives/activities that are happening at their school. While not an exhaustive list, this report is a sampling of the many wonderful types of outdoor learning activities occurring within School District 72 schools.

Photo caption: A student in Michele Merkel's class holds a plant identification card against the foliage as part of a native plant identification activity.

Outdoor Education vs. Learning Outdoors

Often the terms outdoor education and outdoor learning are used interchangeably. According to the Institute for Outdoor Learning, "Outdoor learning is a broad term that includes discovery, experimentation, learning about and connecting to the natural world, and engaging in environmental and adventure activities."

Outdoor education or outdoor learning is often defined as experiential learning in, for, or about the outdoors. Most often, it is used



to refer to a range of organized activities that emphasize teamwork, resilience, environmental education and/or responsible outdoor recreation.

On the other hand, learning outdoors offers possibilities for cross-curricular learning and is often focused on taking students outside to learn what is normally taught in an indoor classroom.

You will see in the examples collected within this report that School District 72 educators are taking both approaches in their lesson planning and educational program offerings.

School Gardens = Living Classrooms



School gardens function as an outdoor classroom to provide hands-on education across the curriculum and inspire environmental stewardship. They also often have multiple learning intentions such as teaching students where their food comes from, generating produce for use in their school's cooking programs, and inspiring social lessons like generosity as schools give produce to members of the community. Cedar Elementary, Cortes Island School, Ocean Grove Elementary, Quadra Elementary, Carihi Secondary, Timberline Secondary and Robron Centre all have school gardens.

Cortes Island School has had a school garden since 2011. Math and geometry lessons have had real life connections when students measure and calculate the garden area to determine the number of beds. Science lessons have included how to determine the soil PH, pest identification and how to compost.

Outdoor Learning Kits

Several elementary schools like Cedar, Georgia Park and École Willow Point have created outdoor learning kits to help students study elements of the outdoors. The kit is often in a backpack for students to carry the supplies and contains such items as magnifiers, notebooks, clipboards, field guides, plant ID cards, picture books, bug boxes and knee mats. They can be used to explore forested areas on school grounds or on field trips.

Photo caption: Some of Cedar Elementary's outdoor learning kits created by teacher Amanda Schulz and teacher-librarian Emily Kay.



Forest School



At Georgia Park Elementary, each division spends 50 minutes per week with learning outdoors mainly in a forest area beside the school and in the school garden. The initiative allows students to spend time in nature. Each student has been provided an individual kit with a waterproof journal, clipboard, and magnifying glass.



Georgia Park Vice-Principal Sheila McGrath will give a presentation to the board about Forest School at an upcoming public board meeting.

Finding Ways to Take the Curriculum Outside and Make Connections

At École Willow Point, all classes go outside on a regular basis accessing the 'little forest' across the street, Willow Creek, or to the beach. For science class students can explore, observe, and find characteristics of local plants and animals. For math, students find nature elements of different shapes and patterning. Art class can create projects inspired by nature and literacy lessons use the outdoors to learn new vocabulary, inspire journal writing and readings.

Penfield K/1 teachers use the small forest adjacent to the school yard for play-based learning that includes ecosystems and plant identification. The school's grade 2/3 cohort also has a three-day a week course outside that involves science, socials, and math lessons through a discovery-type program.



Often schools look to incorporate natural elements into art projects. For example, Surge Narrows kindergarten to grade 8 students collect items and create their own

pieces of nature art from photos to preserve the piece's short lifespan, using a branch and roots to build a silent wind-chime, and building rock

sculptures. At Cortes island School, students often gather leaves for art projects and craft necklaces from rosehip and arbutus berries.



For PE classes, schools will regularly head outdoors with schools like Southgate and Timberline routinely having students run or walk in Beaver Lodge Lands. Timberline PE classes have

also gone for field trips to run through the Canyon View Trail. Recently, Southgate's eBlend class has spent interaction days in Beaver Lodge Lands mountain biking.













At the secondary level, Stream to Sea teaches concepts found in Life Sciences 11 and Environmental Science 11 by investigating the interactions within the major ecosystems that make up the Campbell River watershed.

Incorporating Indigenous Ways of Knowing and Doing

Georgia Park Elementary School Forest School teachers present...

Beach Scavenger Hunt

Learn about the following animals and plants at the beach.
Practice the First Voices word for each one.

		
Barnacle - <i>tlomajc</i>	Cockle - <i>Áiyam</i>	Eagle - <i>qayk</i> ^w
		
Clam - <i>totmow</i>	Eelgrass - <i>laqamogaf</i>	Crab - <i>xyxyéq</i>
		
Horse clam - <i>mafi</i>	Mussel - <i>sa7ma</i>	Oyster - <i>loxlox</i>
		
Purple sea urchin - <i>moseq</i> ^w	Rock - <i>yalis</i>	Seagull - <i>hayom</i>

BONUS: People of the Salish Sea
List the animals living together in the Salish Sea.

Outside learning provides many natural ways to draw connections to Indigenous ways of knowing and doing into activities and lessons. As part of Georgia Park's Forest School students are provided Coast Salish names as part of their learning activities, such as a beach scavenger hunt to build language knowledge and word recognition. Southgate Middle School staff often use the Beach Search and Find, and ethnobotany resources created by Indigenous Education to help guide students toward stewardship and recognize that we are guests upon the unceded territory. The resource provides learning opportunities around how each item is used by Indigenous people and the Kwak'wala words for each item.

Penfield has had a school-wide ethnobotany program for the last two years with the guidance of an Indigenous support teacher and has developed their own school kit. With the help of an Elder (as the pandemic allows) Penfield students are investigating plants and learning about their traditional uses with an Indigenous language component.

Wilderness Wednesdays

One of Sandowne's grade 4/5 classes has started Wilderness Wednesdays, spending an hour outside on Wednesday afternoons. Students have been participating in team building activities to build class community that focuses on social emotional learning. Once all the class walking field trip permission forms have been returned the goal is to

venture off the school grounds and tie more of the curriculum into the outdoors with literacy, math, science, socials, and art lessons.

Creative Imagination Spaces

Ripple Rock Elementary has created an outside creative imagination space called, Loose Parts. Random objects such as tires, PVC pipes, pool noodles, blocks of wood, large spools from wire and rope, etc. are available on a section of the school field for students to use their imagination and creativity to safely build and create whatever they choose.



Cortes Island School has created a meeting circle in their Fairy Forest, a forested area adjacent to the school. Sixteen fir rounds were cut and delivered to the school and students unloaded the wood and set up the circle. The Fairy Forest circle is used for stories, songs, and dramatic play.

School Nature-Scaping Projects

Robron Centre has received a donation from “Bulbs for Kids” of 500+ bulbs of different flower varieties that they plan to have students plant around the school grounds as an opportunity to encourage pride in the school and to teach students about different gardening techniques.



École Willow Point with support of a Go Grant from the Habitat Conservation Trust Foundation and their BC Wild School facilitator Luisa Richardson has embarked on a nature scaping project, planting nine trees in the front of the school, three in the parking median, six along the adventure playground and planting two shrub areas at both ends of the parking median. All plants and trees are native species. Corinne Matheson from Mystic Woods Landscape Design and Chuck DeSorcy consulted during project planning, Ian Baikie helped dig the holes in preparation for planting, Greenways Land Trust



supplied the tools, gloves, and mulch. Each class chose a tree or shrub area to help plant and the school identified curriculum goals for each grade level and planned pre- and post-planting activities.



Habitat Restoration and Conservation

Quadra's eBlend program is restoring the school pond to serve as a habitat once again for Mallard ducks. Quadra Elementary is on the Pidcock Creek watershed and the class takes a 15-minute walking field trip for microscope study and writing observations.



The school has also set up an outdoor learning lab at Drew Creek on Quadra Island to assess the viability of the creek to support salmon release. Teachers have accessed local expert support to help students build bridges, trails, pull invasive plants, learn about sustainable woodlot management, homesteading/small scale farming and salmon habitat restoration.

Outdoor Adventures and Survival Skills

Since 2017 Timberline has offered the Adventures Program as a BAA offering. The outdoor education component of the program seeks to introduce students to a variety of outdoor activities and give students the basis for a lifetime of outdoor adventure. Students study units on water travel, back-country travel, rock climbing, winter back-country travel, winter camping and leadership and First Nations natural patterns.

Some students at Southgate Middle School are studying a survival themed humanities, math, and science unit. In a recent assignment, students had to collect fire building supplies from the school forest and went to the beach to learn to make small fires. The hope is to expand into more survival skills such as traditional food sources, shelter building, etc.

Carihi Secondary offers trout and salmon fly fishing courses to try to take full advantage of the local rivers and lakes and to encourage students to explore and fish the outdoors in a respectful and safe way, as well as promote stewardship of BC's rivers. Skills involved in these courses include fly casting, fly tying, rod making, knot tying, first-aid and safety, communication and etiquette, and basic survival and fishing skills.

Outdoor Learning Committee

Penfield Elementary has established an outdoor learning committee and has a teacher appointed as the outdoor learning leader for the school. The committee was established at the initiative of three passionate educators to create opportunities for collaboration on outdoor learning, as well as to compile resources and programs for other teachers.

Partnerships with Environmental Organizations

As touched on throughout this report, School District 72 schools have for years partnered with several outside organizations, such as Habitat Conservation Trust Foundation and Greenways Land Trust, to access grant funds and outside presenters on environmental topics to help connect curriculum content to the environment we live in.

Again, this report is merely an overview and not a complete list of all the activities or partnerships across the district through the years. Our apologies to any organization that we failed to name within this report.

See the appendix for a report from Greenways Land Trust on their current programming and how they work with students.

Conclusion

When the Board of Education requested this report from district management the board indicated that it was so that trustees could consider next steps on sustainable support to broaden outdoor learning. As schools sent information on their initiatives some schools also included possible ideas or suggestions for the board's consideration. They were:

- Establishment of a district outdoor learning project committee.
- Equipment that students could sit on outdoors and methods for transporting supplies safely to and from the classroom.
- Professional development opportunities with a focus on outdoor learning and the use of outdoor learning consultants.
- Outdoor garden equipment.
- Support for each school in the district to have their own copies of the Beach Search and Find and ethnobotany resources from Indigenous Education.
- Support for school projects such as a wetland re-saturation at Quadra Elementary. The school is hoping to restore an area of their field that at one time was a wetland as it is often swampy and not useable as a school field.
- Support for the creation of permanent outdoor classrooms or covered structures.

OUTDOOR EDUCATION OPPORTUNITIES IN SD72

GREENWAYS LAND TRUST



Our classes

How we work with students

Partnering directly with school teachers and administration, Greenways delivers hands-on environmental education programming to students in School District 72, from Kindergarten to Grade 12.

The majority of our classes take place outdoors in our public forests and along our many urban creeks. We also provide in-class learning opportunities through presentations on environmental topics and interactive displays like our watershed model. We help students connect curriculum content to the environment we live in. This learning happens year-round.

Greenways has been working with classes in SD72 since its establishment in 1996. At the time, it was on a small scale and volunteer-led. Now, it is one of the organization's core projects, and we work with hundreds of students annually. This is largely due to two large grants we received from Environment Canada (2016 & 2019) that have allowed staff time and resources to share with school groups.

Greenways currently covers 100% of the costs of their programming for SD72 classes through grant funding. (Currently a blend of provincial, municipal, and federal funding.) We work with the City of Campbell River to obtain permissions and create site plans for our hands-on projects, and we provide all necessary tools for classes. We currently have one staff member dedicated to planning, delivering, and reporting on our educational programming, and many volunteer helpers.

Notable is the steady increase in participation in our programming by staff and students as we have expanded our programs over the years. The demand for this type of hands-on, outdoor learning is there and growing; we simply need more resources in order to meet it.

Current Programming

For the 2020/21 school year we are bringing environmental education opportunities closer to schools by teaching in school forest spaces (reducing bussing). As always, these lessons will cover subjects such as watersheds, biodiversity, plant identification, water quality, salmon life cycles and habitat, plus special topics as requested by teachers (climate change, nutrient cycling, etc.). Storm drain marking and invasive species removal provide opportunities for students to get hands-on right in their neighbourhood.

We will continue to have opportunities available in greenspaces around town. We will wrap up the planting that was delayed in spring 2020 with students at the Georgia Park Forest and EDM Forest this fall. We will also be working with students on two new sites in the Simms Creek Greenway and at Penfield Elementary to do water quality testing and habitat enhancement.

Opportunities are available at Baikie Island for planting, invasive species removal, and interpretive walks. Classes interested in trail maintenance can get involved in the Beaver Lodge Forest Lands. Previous project sites - for example: Dick Murphy Park, Millennium Park, Kingfisher Creek - will also be available for classes interested in returning.



2019/20 Summary

In 2019/20, we worked with classes at: Georgia Park Forest (tributary of Willow Creek), EDM Forest (Nunns Creek), Kingfisher Creek, Beaver Lodge Forest Lands, and at 6 different school gardens.

We worked with classes from: Willow Point, Cedar, Ripple Rock, Sandowne, Penfield, Southgate, Phoenix, Carihi, Timberline.

Some of the hands-on activities we did included: garbage clean-ups, invasive species removal, native species planting, trail maintenance, storm drain marking. We also coordinated community volunteers to care for school gardens over the summer so that there would be plants growing for classes to care for, harvest, and learn about come September.

We led educational activities and games on subjects like: water quality, watersheds, biodiversity, plant identification, the salmon life cycle, beavers in our watersheds, ecological restoration.

Despite the fact that the year was cut short due to COVID-19 concerns, we led 34 sessions with school groups and engaged with 816 students.

2018/19 Summary

In 2018/19, we worked with classes at: Dick Murphy Park, Georgia Park Forest, Myrt Thompson Trail, Kingfisher Creek, Beaver Lodge Forest Lands, Millennium Park

We worked with classes from: Cedar, EDM, Phoenix, Carihi, Southgate, Timberline, Sandowne, Robron, Georgia Park, Ocean Grove

Some of the hands-on activities we did included: invasive species removal and management, native species planting, mulching, trail maintenance, building and installing habitat features,

We also led educational activities and games on subjects like: water quality, watersheds, biodiversity, plant identification, the salmon life cycle, beavers in our watersheds, ecological restoration.

In 2018/19, we worked with over 35 classes and engaged with over 650 students.

Testimonials

"My class enjoyed the work and really felt like they were making a difference."

~ Teacher from Southgate School, 2020

"Thanks so much for the walk. The students drew detailed pictures about how much they enjoyed it. They have wonderful conversations about the adventures. We are making an iPad book of the plant names, taking photos of the plants and naming them."

~ Teacher from Cedar Elementary, 2020

"A person/group who inspires me is... The Greenways Land trust. They are an organization that helps local environment projects like...fighting off invasive species, creating homes for wildlife and bugs, they mulch trees and other things like that. When I get a bit older I hope to lead a group like theres and do small projects to help wildlife".

~ Grade 4 student, Georgia Park Elementary, 2019

"Just wanted to send a quick note to say a big thank you for the great field trip to Kingfisher Creek. We were all so impressed with the activities you had organized and the knowledge and skills of all the volunteers. The kids loved it! Their engagement the whole time was a testament to your program. We were so happy with the success of the field trip and the opportunity for our students to come away feeling that success – teachers said it was the best trip of the year. What a fabulous way to connect to the beaver learning we've done in class."

~ Teacher from Cedar School, 2019

