

Runnymede Public School

Teaching in Our Schoolyard

Resource Guide



Table of Contents

Map of the Schoolyard	.....4
History of the Schoolyard	.....5
Reasons why students need outdoor classrooms	.....7
Your Involvement in the schoolyard	.....8
The Hillside Garden	
Our Biggest Challenges	.....9
Special Features of the Hillside Garden	.....10
Medicine Wheel Garden	.....11
Connecting the Medicine Wheel to the Curriculum	.....12
Medicinal Properties of the Healing Plants	.....13
Art in the Schoolyard	.....15
Curriculum Connections	.....22
Preparing for the Outdoor Classroom	.....22
Primary Activities	.....23
Junior Activities	.....25
Intermediate Activities	.....27
Take your Class Outside for Art	.....29
Learning Activities on the Asphalt	.....30
Resources	.....32
School Library Resources	.....32
Digital Resources	.....34
Acknowledgments	.....35

Introduction

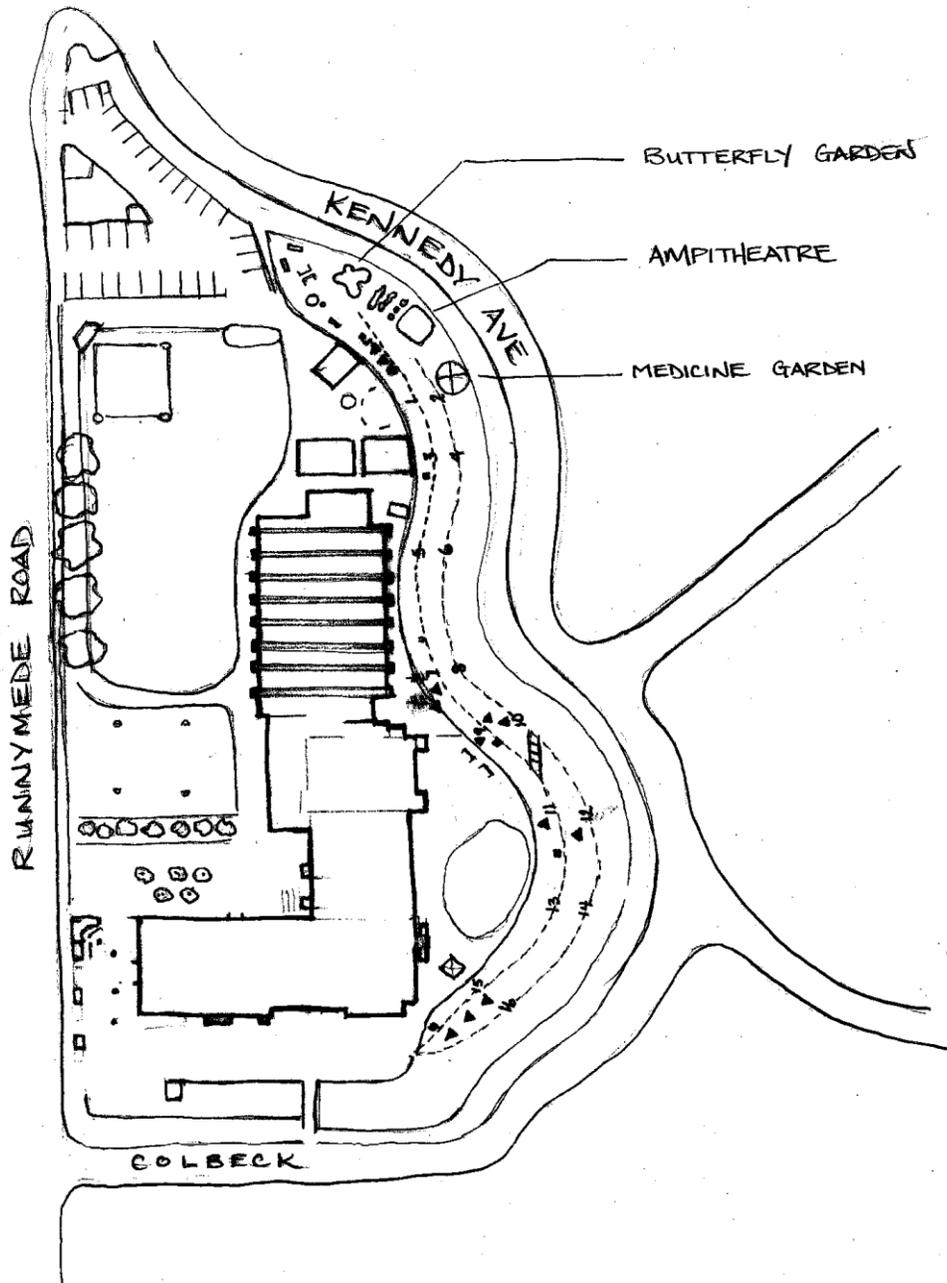
Runnymede Public School is lucky to have one of the most varied and interesting schoolyards in the Toronto District School Board - it offers teachers and students a unique combination of naturalized gardens, students' artworks and play areas to explore. Seen as a large outdoor classroom, it provides a rich resource in supporting and extending the curriculum in science, language arts, math, social studies and the arts. Using the schoolyard to support your students' learning will ensure their connection to and enjoyment of your lessons - and help them to develop a sense of place in their school and neighbourhood.

This resource guide aims to provide Runnymede teachers with background information about the different features of our schoolyard, as well ideas and teaching strategies for maximizing its many benefits. It contains curriculum ideas which encourage the use of this huge outdoor classroom for all grade levels and subject areas all year-round. Bring your class outside to discover that school just doesn't get better than this!



Upper pathway in the Hillside Garden

Map of the Schoolyard



History of the Schoolyard

The Yard & Garden Committee at Runnymede P.S. has led many schoolyard improvement initiatives since its establishment in 1990 when staff and parent volunteers created a 1.5 acre outdoor learning garden on an underused, difficult to maintain, grassy slope bordering the North and East sides of the school. Over the next decade, native plants, shrubs and trees flourished in the area, now known as the Hillside Garden, under the care of staff, students and volunteers, and Runnymede students discovered the joy of having their own natural park in the school's back yard.

In July of 2000, arsonists destroyed Runnymede's playground equipment and the Committee expanded its schoolyard improvement mission to include all outdoor play and learning spaces, effectively considering the schoolyard as a large outdoor classroom. With input from students, parents and staff, the Committee worked with school administrators and the Toronto District School Board to renew Runnymede's landscape. During 2001-2003, exciting additions included a new Adventure Playground, a paved basketball and sports zone, a running track, an irrigated grass playing field and a stone amphitheatre built for use as an outdoor classroom and performance space. More recently, fitness stations and a new Peace Circle have been added to the Runnymede Yard on the west side. To achieve all of this, the Committee and School Council have raised funds through sponsorships, grants, dances, skating events and plant sales to supplement TDSB funding.

Annual '*Art in the Yard*' projects have also been established by the Committee. The Kindergarten doors, once magnets for graffiti, now welcome Runnymede's youngest students with murals featuring their own artwork. Senior students have created a large mural in the front of the school with images from the Hillside Garden. Other students, working with Committee volunteers, created nature-inspired concrete stepping stones used to pave student walkways. This yard improvement, which included a new retaining wall paid for in large part by volunteer fundraising, has ensured the longevity of much needed shade trees in an important social play area.

Since 2004, the Committee has directed its energy towards increasing student involvement in the enhancement of Runnymede's entire outdoor learning environment. The Committee hosts Fall and Spring 'Yard Days' where children, parents and staff clean and beautify the schoolyard to ensure it remains a captivating, multi-use space. These have provided opportunities to come together

as a community to celebrate the seasons, socialize outside of the school's walls, and use the schoolyard in creative ways, such as concerts in the Hillside Garden and community art projects involving parents and their children. We have also worked with teachers to facilitate their learning in the Yard, providing resources and volunteers to maximize their students' learning experiences.

Schoolyard safety is a priority in all project areas. In recent years, we have worked with school administrators, parents, neighbours and the City of Toronto to enhance lighting around the school and cut back overgrown foliage. The committee has also improved pedestrian safety by installing traffic barriers and redesigning the use of a busy shipping and receiving area.

The Yard committee is committed to the long-term maintenance and improvement of the Runnymede schoolyard; we welcome input and involvement from teachers and students to ensure its ongoing use as a rich and engaging outdoor classroom.



First Planting in the Hillside Garden 1990

Reasons Why Students Need Outdoor Classrooms

- To grow inquisitive minds and active bodies.
- To appreciate all disciplines by learning practical reasons for the knowledge they gain in lessons.
- To expand their minds and sights beyond the four walls of their small classrooms.
- To expose them to the Earth's multitude of amazing life forms and physical processes.
- To help them remember what they learned in school (because people only remember what they experience.)
- To expose them to the natural world and its wonders.
- To understand their connection to the world and become better stewards of our environment.
- To be responsible citizens of the world around them.
- To understand that learning, knowing, and growing can and should happen everywhere!

(Georgia Outdoor Classroom Council, 2006)



The Hillside Garden in the mid 1990s

Get Involved in the Runnymede Yard

There are many ways your class can get involved in their schoolyard and make it a more fertile place to learn and grow. Most of these projects lend themselves to cross-curricular education with strong environmental, experiential and citizenship components. Members of the Yard Committee would be happy to help you and your class get started; we have ideas and resources to make it happen!

- **Integrate It into Your Curriculum:** Use the Hillside Garden for more than capture-the-flag! Bring your students to observe the plants and wildlife; draw the trees; collect materials for science projects; inspire their stories and poems.
- **Adopt-an-Art Garden:** Your class can design, develop and care for one of the five container gardens at the front of the school as a class art project.
- **Adopt-a-Tree:** Plant a memorial tree in the Hillside Garden and watch it grow! Use it as a source of materials for art class (leaf prints, bark rubbings) and weave a protective basket around it using natural materials from the garden.
- **Artistic Interventions:** Weave an artwork into a section of fence with your class using natural materials from the garden. Add to the growing collection of nature paintings in the Adventure Yard – raise students’ confidence by having their art on permanent display!
- **Food Garden:** Help design, develop and care for a pioneer, medieval or ancient civilizations food garden. Plant the vegetables from seed in your classroom (science) and then transplant into the garden in the spring.
- **Litter Clean-ups:** Take on a litter clean-up of the schoolyard with your class. Materials collected can be graphed (math), made into collaged anti-littering posters (art) or documented in a journal (language arts.) This could involve promoting and overseeing a recycling program on the school ground, or creating an anti-littering campaign to tie into media literacy.
- **Weed out the ‘Bad Guys’:** A great science project is to learn about invasive plants with your class and help to remove these destructive, non-native species from the Hillside Garden.

The Hillside Garden

Introduction

The Hillside Garden has evolved as an outdoor classroom over a period of almost 15 years. The area has been transformed from an empty grass slope to a lush environment which contains a huge variety of native species of shrubs and trees. The initial planning and planting of the garden was done by Runnymede students with the help of their teachers and parents. Groups of students were responsible for designing a “clump” which contained a tree, a number of shrubs, and some groundcover. The curriculum focus during these early stages of the planting was on the research of suitable native species and the underlying environmentally-sound reasons for creating such a garden.

Now that the garden is fully established, and community clean-up days are integrated into the year-long maintenance and planting plan, the focus of the garden is now on integrating it into the curriculum to maximize its use as an outdoor classroom. The amphitheatre is not only a convenient meeting ground for outdoor lessons, but serves as a staging space for drama activities. The Medicine Wheel can be linked to content in the Native Studies area of the curriculum and the various art installations can provide imagery and inspiration for the study of the visual arts.

Our Biggest Challenges

Erosion - Erosion of pathways is an ongoing problem in the Hillside Garden. Please ensure that your students stay OFF the vertical paths (those going up and down.) We place plant debris (vines, branches, leaves) on these paths to cover them as a reminder to stay off – leaving this debris in place is important in stopping the erosion.

Litter - Collecting the litter that accumulates in the Hillside Garden is a challenge as we have volunteers to do this only twice a year. Please review the rules around littering with your class and ask them to bring ‘litter-free’ lunches to school. Consider taking your class into the garden to collect the litter – this makes it more likely that they won’t litter in the first place.

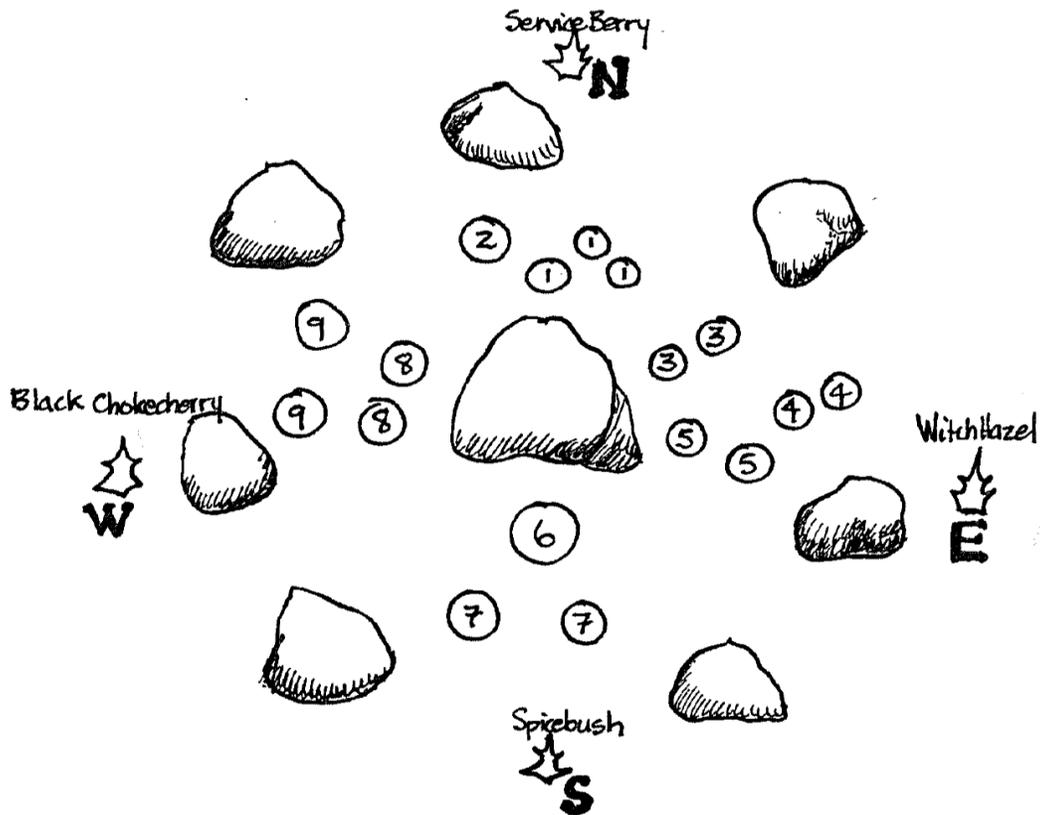
Plant Damage - Every year we have shrubs and trees that are harmed by children breaking off branches and uprooting small plants. Please teach your class that the garden is a living ecosystem that needs care and support to survive.

Special Features of the Hillside Garden

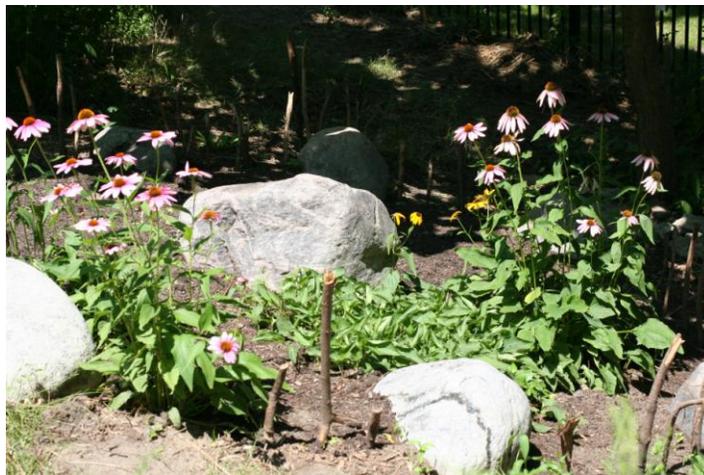
The Hillside Garden contains a number of special features to support curriculum links:

- ***Entrance Arbor*** – is found at the north entrance to the Hillside Garden. Dedicated to one of the founding parent volunteers, Andra , it serves as an entry-way to the special magic of the garden.
- ***Stone Amphitheatre*** – is located at the north end of the garden. It consists of stone seating and a flat area that doubles as a presentation space. Great for drawing, drama, talks and more!
- ***Medicine Wheel Garden*** – is located south of the Stone Amphitheatre. Installed to support the study of native life in Canada, its rock circle and indigenous plants related to the spiritual beliefs of our aboriginal people. (More info is provided in this guide on page 10).
- ***Butterfly Garden*** – is located north of the Stone Amphitheatre. Signalled by a sign on the fence as well as a nearby collection of clay butterflies, the flowers planted here attract butterflies in warm weather. Currently the Butterfly Garden consists mainly of Black-eyed Susans, Bee Balm and Woodland Sunflowers; a wider variety of butterfly-attracting native flowers will be added each year.
- ***Food garden*** – is a small circular garden bed that exists near the telephone pole at the north end of the garden. It originated as a Pizza Garden in 2005 (planted with basil, tomatoes, eggplants and oregano) and most recently was re-planted as a medieval food garden. Students often germinate the seeds in their classroom in the early spring and then transplant into the food garden in May, returning in the fall to harvest.
- ***Artworks in the Garden*** – every year art by Runnymede students is created here and often installed in the garden for varying lengths of time. The clay butterfly installation, near the Butterfly garden, was created by students at a fall Yard Day. Grade five students created a giant woven grapevine basket around the Medicine Wheel garden in 2006; another class of grade fives knit a large tree cosy in the spring of 2009. Many classes use the plants and wildlife in the garden to inspire their drawings, paintings and photographs.
- ***KinderGarden*** – JK/SK students, their teachers and parents are helping to plan and plant a new sensory garden for young learners in the south side of the schoolyard starting in 2010. It will feature plantings that appeal to their senses of touch, taste, smell, hearing, and sight and offer teachers a special means of taking their young learners outside into the natural world.

The Medicine Wheel Garden



1. Evening Primrose 2. Rudbeckia 3. Bee Balm 4. Sage 5. Purple Coneflower
6. Indian Red Lobelia 7. Yarrow 8. St. John's Wort 9. Great Blue Lobelia



The Medicine Wheel Garden

Connecting the Medicine Wheel to the Curriculum

The Medicine Wheel Garden was created to support the study of aboriginal life at the grade 3 and 6 levels, as well as aspects of the Health, History and Science curricula. What follows is a summary of its origins to help teachers and students better understand its roots.

The Circle teachings come from the Anishinabe people, more commonly known as the Ojibway nation. All of creation is represented on the medicine wheel: it includes all nations on earth, represented by four colours – yellow, red, black, and white. The teaching is that all things in life are in a circle. The earth is a circle, or sphere, as are the Sun, Moon, and all of the other planets and stars in our universe. The cycles of the seasons and day and night are circular. The life cycle is circular, from infancy to youth to adulthood to old age. These teachings are divided into the four directions.

East – In the East, the colour is yellow. It is the dawn time of day, representing birth. It is the season of spring and the time of new life. The Eagle is the animal of the East direction. The eagle is the bird that flies closest to Great Mystery or Creator, Gitchie Manitou, and acts as the messenger between the people and Creator. Traditional Native people have a Sunrise Ceremony at dawn to offer tobacco to the sacred fire and give thanks for the new day. The lessons we learn in the East are about kindness, open-mindedness, innocence, you, hope, and leadership.

South – In the South, the colour is red. It is the middle part of the day and the season of summer. The time of life here is youth or adolescence. The animal of the South is the deer who teaches us about being generous because he gives us meat to eat and skins for our clothing, drums, and shoes. Deer also teaches us to be loyal, honest, and respectful to others. The sacred medicine of the South is cedar. Cedar is burned to purify your body from disease and to protect you.

West – The colour of the West is black. It is sunset time and the autumn time of the year. It is also the time of your life when you are an adult. In the West is a doorway through which all people must go when they leave the earth for the Spirit World. For the Anishinabe people, the bison (buffalo) guards this doorway. The buffalo is sacred to the Native peoples because of everything buffalo provided for survival. The lessons that buffalo teaches us are about sharing with others. The sacred medicine of the West is sage, which cleanses our spirits.

North – The colour of the North is white. It is nighttime and the winter of the year. It represents the time of your life when you are an Elder. The sacred medicine of the North is the sweet grass. Aboriginal peoples braid this grass as if it were Mother Earth's hair. The smoke from this sweet grass offers protection and helps to take away hunger when fasting. The animal of the North is the bear. The bear teaches us about the importance of fasting because the bear goes to sleep in the winter and doesn't eat for a long time until the spring. The lessons of the North are about strength and truth and how to speak with a voice of wisdom. The North represents the Elders who are respected for their guidance and advice.

(from *Aboriginal Voices in the Curriculum: A Guide to Teaching Aboriginal Studies in K-8 Classrooms*, ©Toronto District School Board)

Medicinal Properties of the Healing Plants

1. Evening Primrose (*Oenothera speciosa*)

All parts of this plant were traditionally used for healing purposes such as wound dressings and to relieve bruises. The roots steamed as vegetables were made into teas to aid digestion as well as to promote clear skin. According to Seneca wisdom, the evening primrose provided athletes with great strength for lacrosse, snow snake and wrestling. The roots were chewed and rubbed over the arm muscles. It is a 4-petaled yellow flower. Its blossoms open on cloudy days or at sundown for the evening pollinators. The blossoms have slight phosphorescence acquired from storing up sunlight during the day then emitting their own faint light at night.

2. Black-eyed Susan (*Rudbeckia hirta*)

This plant's healing qualities were well known to Native Americans who used it to treat skin infections. And like the Purple Coneflower, the Black-Eyed Susan has been found to stimulate the immune system to ward off colds and flues.

3. Bee Balm (*Monarda didyma*)

All parts were used to treat colic, insomnia, stomach aches and heart trouble. Stems were used for toothpastes while leaves and blossoms were headache and cold remedies made from strong teas. The tubular flowers lure hummingbirds and butterflies. The plant produces bright red and purple flowers throughout the summer.

4. Sage (*Salvia* spp.)

Its Latin name comes from “salvare” meaning to cure and its common name, sage, refers to wisdom. Dried sage leaves, stems, blossoms and seeds have long been used by native people as sacred smudging herbs. In sweat lodges, the sage was ignited and its smoke was swept, or smudged over the person to wash away sadness and anxieties. The person could then focus on what they wanted to accomplish.

5. Purple Coneflower (*Echinacea purpurea*)

Natives used all parts of this flower for foods and medicines in treating colds, flu, cancers, spider and snake bites. Teas were made from dried roots and leaves.

6. Indian Red (*Lobelia cardinalis*)

Iroquois Indians used strong teas made from the roots to treat typhoid fever and stomach cramps. The dried leaves were smoked to treat asthma and bronchitis. Jemina Gibson, a Cayuga herbalist from the Six Nations Reserve said in 1914, “a person who is suffering sleeps on lobelia to learn the cause of his suffering. Put it under your pillow at night and dream about your sickness to discover what is wrong with you. The next morning, you will know what medicine to use.

7. Yarrow (*Achillea millefolium*)

Its Latin name refers to the Greek hero, Achilles, who was noted for his strength and used this plant to heal wounds during the Trojan war. “Millefolium” means a thousand leaves, and this is what gives the plant its very feathery effect. Archeological evidence suggests that yarrow has been grown for some 60,000 years on every continent. Native people, especially Iroquois and Mi’kmaq used yarrow for wound dressings and to treat stomach problems.

8. St John’s Wort (*Hypericum perforatum*)

In the New World, the native American Indians used several indigenous species of St. John’s Wort to treat stomach and skin problems, as well as snake bites. It also acted as a sedative to calm people.

9. Great Blue Lobelia (*Lobelia siphilitica*)

Strong teas were made from its leaves to treat colds, headaches and stomach problems. Parts of the whole plant could also be used to make skin washes to treat sores and wounds. The pale blue flowers were believed to have magical powers such as the ability to ward off ghosts.

Art in the Schoolyard



Gr. 2 Art/Science Garden 2007

Over the years, a number of permanent artworks have been created by Runnymede students and installed in the schoolyard. Often inspired by the natural environment of the school's Hillside Garden, these collaborative projects were designed to involve students in creative experiences that also enhance the environment of the yard. These artworks can be used as a teaching resource to help achieve visual arts curriculum expectations, either for viewing and discussing artworks firsthand, or by inspiring new artworks. What follows is a brief history of each project and suggestions for learning activities that involve these artworks.

Thanks go to the students, teachers and volunteers who have given time and energy to these projects; and to the Runnymede School Council, the school administration, the Ontario Arts Council Arts-in-Education program, and local businesses for supporting their creation.

THE PRIMARY DOOR MURALS

Where: Located on five doors in the Adventure Yard (rear of the school near the play equipment.)

Artists: The images for the doors were created by primary students (JK- 2) at Runnymede. Their drawings were transferred onto the doors in paint by parent volunteers.

Artwork: The four doors closest to the JK/SK rooms illustrate the four seasons in the Hillside Garden. The double doors to the north side of the yard depict the life cycle of the butterflies found in the garden. First painted in 2003, new images were painted in 2005 when the doors were replaced.

Suggested Activities:

- Describe the subject of each door, starting with the general image and then noting all of the details. What season is depicted on each door?
- Critique the design of each door: what is the best part? Could the design be improved?
- Choose a song to complement the image on each door.
- Go on a treasure hunt: locate one detail from each door in the real Hillside Garden.
- Try it yourself: working individually or in groups, design a mural that captures your favourite season in the Hillside Garden. Make sketches in the garden during each season, and paint a version of the mural on kraft paper to display on your classroom door.

THE GARDEN STONES PROJECT

Where: In the two pathways of the raised bed in the Runnymede yard (west side of the building.)

Artists: Stone designs created by 175 grade 8 students under the direction of professional artist Lois Dellert in May 2004. The stones were cast by a team of parent volunteers.

Artwork: These concrete paving stones were created using clay molds designed by the students. Four different designs are embedded in each stone, using a relief sculpture technique. All contain environmental messages.

Suggested Activities:

- Look carefully at the images on each stone. Which images do you find most powerful?
- Pick a stone and try to interpret the ideas or messages sent by each image. Which is most effective?
- Create a story using one of the images as inspiration.
- Make a rubbing of your favourite image. Add text, drawing or painting to turn it into your own work of art.
- Cast a relief sculpture yourself: press a layer of clay into the bottom of a small plastic container, and shape the clay into your design. Cover the clay with two inches of quick-set plaster. Once set, peel the plaster sculpture off of the clay bottom.
- Plan a functional artwork for the schoolyard. Consider its design, message, materials and size. Can you create something functional and intriguing?

THE HILLSIDE GARDEN MURAL

Where: On the outside of the senior wing of the school, in the Runnymede yard (west side of the building.)

Artists: Designed and painted by 24 grade seven students under the direction of professional artist Allycia Uccello.

Artwork: The mural depicts the Hillside Garden, and is intended to bring a little bit of the garden into the front play yard. It shows animals, plants and people often found in the garden, and highlights the memorial pergola by showing the rose bushes planted near it in full bloom. It was created in May 2005.

Suggested Activities:

- Look carefully at the mural and then walk through the Hillside Garden; can you find the viewpoint that the mural was painted from? How is the image similar to and different from the real garden?
- Play a game of Eye Spy with the mural: how many animals can you see? How many people? How many different plants? Can you spy any of these specific things in the garden?
- Imagine adding yourself to the mural: where would you be? What would you be doing?
- Plan a different graffiti mural for the wall with a group of classmates. What image would you like to see there? What message would you send about the school?
- Go on a walking tour of Bloor West Village looking for other large murals. Where are they? Who created them? What messages do they send?

THE FRONT DOOR MURAL

Where: On the outside of the main entrance doors, in the Runnymede yard (west side of the building.)

Artists: Designed and painted by 24 grade seven students under the direction of artist Christina Barnett/Workman.

Artwork: The mural depicts the tree of learning at Runnymede, with the roots of the tree representing what the students take from the school (symbols showing friendship, music and ideas,) and the top leaves representing what they want to give back to the community as they grow (symbols of love, wisdom and peace.) Behind the tree is the school's mascot, the Runnymede Lion. It was created in May 2006.

Suggested Activities:

- Look carefully at the mural and ask students to identify its key parts. Can they figure out its message?
- Have the class imagine that they had been on the original mural team – would they have designed something different? Can they do it better? Have them make small paintings or drawings showing what they would do if they could re-design the front door murals.
- As a class, design a new set of door murals for a different entrance at the school and have a team of students 'pitch' the principal on making the mural a reality.

THE ADVENTURE YARD FENCE PAINTINGS

Where: On the back fence of the Adventure Yard, (the playground on the east side of the building.)

Artists: Designed and painted by Kindergarten to grade six students under the direction of artist Hilary Inwood.

Artwork: The paintings are all related in theme to the Hillside Garden. Some depict it in different seasons, while others show details of leaves, animals or plants. While some of these paintings were created in class, many of them were created as part of the school's Yard days, which happen in the fall and the spring each year. The installation is being created in stages, beginning in April 2005.

Suggested Activities:

- Take the class outside to view the artworks in this 'outdoor art gallery'. Which artwork is their favourite? Why? Can they find any themes that could organize the paintings?
- After a walk through the Hillside Garden, have the class create paintings of their own about the garden to add to this installation.
- What other types of decorations could be designed for the chain link fences at the school? Ask students to consider using natural or found materials to design an art installation.

THE RUNNYMEDE YARD FENCE PAINTINGS

Where: On the front fence of the Runnymede Yard, which runs along Runnymede Road (west side of the building.)

Artists: Designed and painted by 64 grade seven students under the direction of artist Deborah Kuperhouse.

Artwork: The paintings depict aspects of school life important to the students, and make reference to music, art, sports, learning, and friendship. There are 32 in total, with students working in pairs to create each one. It was created in May 2007.

Suggested Activities:

- Take a walk along Runnymede Road to view these paintings. Which aspects of school culture does each represent? Which one is most effective in getting its message across?
- Discuss the effects of graffiti on these works with the class. Does the graffiti improve them? Is graffiti of this type (tagging) a form of art, or vandalism? Why do people graffiti others' artworks?
- Ask the class to design their own additions to this art installation using drawing, painting or photography. What symbols best represent their experience at Runnymede?

THE HILLSIDE GARDEN NEST

Where: In the Hillside Garden, surrounding the Medicine Wheel Garden (east side of the school, near the stone amphitheatre.)

Artists: Designed and created by a grade five class under the direction of teacher Anne Lakoff and artist Hilary Inwood.

Artwork: The nest was created as part of a stewardship project to protect the Medicine Wheel garden from being trampled. Created collaboratively, it involved weaving grapevine to create a natural fence around the garden. It was created in the fall and spring of 2006/7, and removed in the fall of 2009.

Suggested Activities:

- Conduct an environmental survey of the Runnymede Yard as a science project, and then create an artwork to address one of our environmental challenges.
- Harvest the grapevine on the fence on the north end of the yard and use for a sculpture project with your class.

THE ARTISTIC GARDENS PROJECT

Where: Outside the main entrance to the school, along Runnymede Road (west side of the building.)

Artists: Designed and created by five classes, grades 1-5, under the direction of artist Hilary Inwood.

Artwork: Five raised-bed gardens were installed with artworks reflecting each classes' learning in a specific subject that year. The students and teachers were all involved in the design and creation of the artworks for their gardens. Some were intended as permanent installations, while others were temporary; some will continue to 'grow' by being added to by future classes. The gardens and teachers involved were:

Insect Garden (gr. 1 science) Ms. K. McGill – clay bug houses, insect rock paintings, insect clay tiles

Wind, Weather and Sky Garden (grade 2 science) Ms. G. Rhee – things that fly garden stakes, the painted rainbow, weather clay relief tiles

Pioneer Garden (gr. 3 social studies) Ms. P. Stott – scarecrows and a pioneer food garden

Medieval Garden (gr. 4 social studies) Ms. M. Enrico – hanging medieval clay relief tiles, medieval life garden stakes, medieval herb garden

Ancient Civilization Garden (gr. 5 social studies) Ms. A. Lakoff – God's eyes

These were originally created in May 2007, but were added to again in May 2008.

Suggested Activities:

- As a class, interview one of the teachers involved in the creation of these gardens. What did their class do to create the art garden, and how was it received?
- Adopt one of these front garden beds as a class, and design a special garden that links to an aspect of your curriculum.

THE OAK COSY

Where: In the Hillside Garden near its north end (east side of the school, near the stone amphitheatre.)

Artists: Designed and created by a grade five class under the direction of teacher Anne Lakoff.

Artwork: The cosy was designed as a temporary 'knit bombing' installation that draws attention to a feature in the garden that is often overlooked. Created collaboratively by the class, it involved knitting small squares and rectangles in class and then sewing them together to create a cosy for the tree. This tree is important as it signifies the proximity of our naturalized garden to the Black Oak Savannah of High Park, a rare eco-system. It was created in the spring of 2009.

Suggested Activities:

- Send the class out into the Hillside Garden to find the cosy. Ask them to pretend to be detectives to figure out who created it, how it was created, and why they did it.
- Surf the Internet to find other examples of knit bombing (aka grafknitti). What other types can the class find? Why do people do this form of art?
- Teach the class how to knit, and then design a knit bombing installation of their own for a feature of the garden that is special to them.

THE PEACE CIRCLE

Where: In the Runnymede Yard near its north end (between the portables.)

Artists: Designed and created by parent volunteers; mandala paintings by students.

Artwork: Created as an initiative of the Yard Committee, the circle was implemented as an area of quiet play in the schoolyard. It consists of a circle of ten sitting rocks (each subscribed with a trait of character education,) a centre 'talking' stone (inscribed with the word 'peace' in English, French and Anishnabe,) three maple trees, two benches and a series of mandala paintings (all related to the theme of peace.) It was created in the spring of 2009.

Suggested Activities:

- Each month use the Peace Circle as the setting to discuss a trait of character education. What does it mean? How is it best to incorporate it in our lives? Using the stone circle, have the class make up short skits to demonstrate the trait.
- The Anishnabe word for 'peace' is included in the centre stone. Have the class research the origins of the native people in this area. Who lived here and when? What is their story? What did native people do to achieve peace in their own communities?
- Look carefully at the art in the paintings. Why was the circular format of mandalas used? (Do an Internet search on mandalas.) Have students work in small groups to design their own peace mandala; contact the Yard Committee about getting these added permanently to the Peace Circle.
- Learn more about how to incorporate the principles of Peace Education into your curriculum. Go to the International School Peace Gardens website for more info (see the Digital Resources on page 33).

‘ACTS OF GREEN’ PAINTINGS

Where: In the Runnymede Yard along its south end (on Colbeck Ave.)

Artists: Designed and created by Andrew Reynold’s grade six class under the direction of artist Hilary Inwood.

Artwork: Created as an initiative of the Yard Committee, these paintings raise awareness about the environmental issues of our own schoolyard, such as air pollution through car idling, soil erosion, loss of animal habitat, and litter. The grade six students investigated these issues on the schoolyard, and created small mural paintings to raise awareness of how to address them. The paintings are installed along the outer fence of the schoolyard, where parents pick up and drop off their children – a perfect location to discuss the effects of idling. It was created in the spring of 2010.

Suggested Activities:

- View the paintings as a class and identify the environmental challenge raised by each one. Ask students to locate evidence of each challenge in the schoolyard and then brainstorm ways to ameliorate the problem. Working in conjunction with the Yard Committee, work towards solutions to these problems.
- After viewing the paintings, ask your class to adopt one of the challenges raised as a class project. Work towards a deep understanding of this problem (eg. loss of animal habitat) across the curriculum, and send letters or artworks to public officials explaining why this is a problem and how it can be addressed. Ask for a response and action based on the letter campaign.
- Use the paintings as inspiration for other arts-based activities that raise awareness about environmental issues. Ask students to make a skit, sculpture, song or poem about these issues and their possible solutions, and share these in an assembly or on the Yard Committee bulletin board for others to see.

THE BIRD HOUSE PROJECT

Where: In the Runnymede Yard along its south end (on the chain link fence facing Colbeck Ave.)

Artists: Painted by the kindergarten students in Mrs. Markee, Ms. Jardin, Ms. Pepper and Mme. Bedard’s classes.

Artwork: Created as an initiative of the Yard Committee, these colourful bird houses were painted by Kindergarten students as the starting point for the new ‘KinderGarden’, a garden space designed especially for young learners. The hope is to attract birds to nest in the houses over time. It was created in the spring of 2010.

Suggested Activities:

- Take students out to visit the houses as a viewing activity. Have them describe the colours and shapes of the houses, and identify which one they like best, and which one they think birds will like best. Have them draw or paint pictures of their own ideal house from the perspective of being a bird.
- Learn about indigenous bird species in our neighbourhood with students. Take a walk through the Hillside Garden looking for birds that already live there, and listen carefully for their bird calls; photograph or draw ones they see. Research what types of birds live in the area, and create a field guide with drawings and descriptions to share with others classes.

Curriculum Connections

There are thousands of ways to use the Runnymede Schoolyard to get children outside and learning about the world around them. We have a schoolyard rich in resources, gardens and different environments that can stimulate children's learning, ignite their sense of wonder and make them excited about coming to school. What follows is a collection of tips and activity ideas to encourage you to take your students outside more often.

Preparing to use an Outdoor Classroom

Get to Know Your School Ground

- Take walks through the grounds at different times of the day, while students are at play and when the grounds are quiet. Carefully consider the physical characteristics and educational potentials of the school grounds. Take note of constructive ideas and concerns.
- Consider creating formal gathering places on school grounds to support the use of outdoor classroom teaching. It is a good idea to locate your gathering spaces close to the school for easy access to supplies, materials and assistance from other teachers/staff.

Class Management Strategies for the Outdoors

Participation in outdoor activities may require alternative class management strategies from those applied in indoor settings. Students who have had little previous experience in outdoor settings may require reinforcement of appropriate rules of behaviour.

- Develop conceptual and behavioral skills before heading outdoors. School grounds may often be better used as a site for direct experience rather than a site for direct instruction.
- Develop productive "study buddy" group relations by recognizing, rewarding and building on positive interpersonal dynamics. Know who works well with whom and reward students by letting them choose their partners. Be attentive and inclusive of students with special needs.
- Partner behaviorally challenged students with an adult, if possible.
- Get help. Invite community workers, parents and specialists to join in your activities and work with the students.

Note: Student skills and behavior will generally improve with increased contact and familiarity with the routines and expectations that accompany outdoor learning activities. School programs that provide school ground activities from K to 7 will develop a continuity of appropriate school ground learning behavior.

Ultra Violet Radiation

The peak sun hours of 10 a.m. to 3 p.m. fall within the normal school day, putting children at even greater risk while they are outdoors during school. Use these strategies to decrease their UV exposure:

- use the shade of trees when possible to shelter students from the sun
- encourage students to wear protective clothing and sunscreen
- provide education programs to inform students about sun exposure.

Suggested Activities for the Primary Level

Language Arts

- **Simile Search:** Discuss what a simile is. Find objects you can describe with the phrase, “the _____ is as _____ as a _____” - for example, the dandelion is as yellow as the sun, a fern leaf is as flat as a feather. Create similes using the five senses. Record your findings and share them with the class.
- **A Million Year Picnic:** Take the students out for an early lunch or an afternoon snack in the garden and have them bring along their lunch bags and “picnic blankets”. When they are seated, read Chris Van Allsburg’s book, “Just a Dream” and afterwards, discuss how long it takes certain items to decompose. Have the students discuss the items they have brought, and the merits of the reusable ones (sandwich containers, unpackaged fruit) versus the disposable ones (juice boxes, tin foil, wax paper, etc.)

Drama

- **Animal Charades:** Have the students work in pairs to find clues as to which insects or animals live in our schoolyard. Then gather the class together to act out one of animals/insects they have identified. As each one is acted out, have the students identify how they know that the animal or insect lives in our schoolyard.

Math

- **Autumn Leaf Sort:** Have students walk through Hillside Garden collecting interesting leaves that have fallen. When they return to the classroom children can sort the leaves by their different attributes (e.g. size, colour, shape, # of points, etc.). Leaves can be glued on Bristol board to make a collage. Once sorted, students could help make a graph of the different leaves collected. Leaves could also be measured.
- **Map Skills:** Students can develop map and graphic skills by drawing simple maps of the Hillside Garden using pictorial symbols, colours, legends and cardinal directions. Have them estimate and then measure basic distances (e.g. how many footsteps is the upper path?)

Visual Arts

- **Insect Art:** Go on a search for insects in the schoolyard. If possible capture the insects gently, containing them for a short period in a jar or net. Make a drawing of the insect, observing with the unaided eye, and then a second drawing of the same insect while using a magnifying glass. Release the insects back into nature when done.

Music

- **Outdoor Band/Orchestra/Choir:** The Hillside Garden path provides a great venue for a marching band using percussion instruments. Also consider inviting other classes or parents to hear your class perform vocal or instrumental concerts at the outdoor amphitheatre. (e.g. Songs on an Earth Day theme)
- **Nature Rap:** Ask students to design a rap song from the perspective of one of the animals or insects in the Hillside Garden. Perform the songs in the stone amphitheatre for other classes.

Science

- **Frisbee Tour:** Take a Frisbee out on a walk in the Nature Garden. Throw it gently, then explore and discuss what is found under the Frisbee after it lands.
- **Signs of Spring Scavenger Hunt:** Prepare a chart that lists signs of spring (e.g. buds on trees, robins, grass turning green). Divide students into small groups to find all the items on the chart. (This activity could be used in any season.)
- **Plant Search:** Assign teams of students to observe different plants growing in the garden over the seasons. Make note of the plant's features using all of their senses (touch, sight, sound, etc.) As a class, classify the plants according to their characteristics, and research how these plants are important to the insects and animals who live in the garden.

Social Studies

- **Rules and Responsibilities (Gr.1)** Discuss basic rules of using the Hillside Garden with your class before your first visit (e.g. Walk. Stay on the path. Quiet voices). Gather at the amphitheatre and discuss why the rules are important and brainstorm other rules that show respect for the environment (e.g. Don't litter, don't remove living things.)
- **Pioneer Roleplay:** Have the class imagine that they are pioneers coming to settle in this area for the first time. Give them time to explore the Hillside Garden and consider it as a potential homestead. Where would they build their home? What materials could they use? What would be their source of food or water?

Dance

- **Nature Dance:** Have the students imagine what it would be like if the natural elements in the Hillside Garden could dance: what would a tree dance like? How about a squirrel? How about a raindrop? Divide the class into small groups, and ask them to construct a dance by taking on different roles of these natural elements.



Grade five students working on the Hillside Garden Nest

Suggested Activities for the Junior Level

Language Arts

- **Narrative Nature Stories:** Take the class outside to the garden and brainstorm a list of features that they observe (plants, animals, insects, weather, etc.) Have students choose a word from each group and write a narrative story using these elements.
- **Poetry Sessions:** Students can derive inspiration for writing poetry as they sit out in the nature garden. Have them sit at one spot to observe and listen. They can then jot down sense impressions and create a Haiku (5-7-5 syllable structure) or Tanka (5-7-5-7-7) poem.

Visual Arts

- **Sound Maps:** Have students sit quietly in the garden in one spot for 3-5 minutes, just listening. As they listen, they draw squiggles, lines and shapes to signify the sounds that they hear. These sketches can be brought into the classroom to form the basis for large scale abstract paintings.

Music

- **Nature Music:** What music can the class make using objects found in the schoolyard? Divide the class into small groups and assign them to different parts of the garden (the Hillside Garden, the playground, the Medicine Wheel garden, etc.) Have them compose a short piece of music using whatever objects they find at that site.

Math

- **Outdoor Fermi Problems:** To reinforce students' understanding that math is everywhere, have them observe number related concepts that are apparent in the garden. They can then come up with an estimation problem associated with those observations (e.g. there are 10 shrubs in this section of the garden. How many would you estimate to be in the entire garden?)

Science

- **Adopt-a-Tree:** Students choose one tree to observe throughout the school year as the seasons change. Have them take clipboards, paper, pencils and crayons to observe, draw, measure and describe the tree in each season. Save their work from one season to the next so they can see how the tree has changed.
- **Habitats and Communities** (gr. 4): Have the class examine and demonstrate an understanding of the concepts of habitat by studying one part of the Hillside Garden. Have them identify the factors that could affect habitats of plants and animals in our garden. (e.g. the Butterfly Garden being near the amphitheatre).
- **Classification Study:** Have the class classify plants and animals that they have observed in the Hillside Garden according to similarities and differences.
- **Rocks, Minerals, and Erosion:** Use the garden and yard to investigate the factors that cause erosion of the landscape. (Students have planted various species in the garden to help prevent erosion of the steep hillside).
- **Weather Studies:** After students have designed and constructed a variety of instruments for recording various features of the weather, they can test these instruments in the Hillside Garden.

- **Up in the Clouds:** Take students out to the garden on a number of occasions to observe the clouds and discuss the weather systems they indicate. Make a chart to track their observations, predictions and what actually happened.

Drama

- **Nature-based Theatre:** Use the stone amphitheatre as the setting for a favourite drama activity such as tableaux, roleplays or skits. Relate these to the theme of their science or social studies units.

Social Studies

- **Living like a King:** Use the Hillside Garden as the imaginary territory of a medieval king. Assign students to take on different roles (king, knights, serfs, etc.) and discuss the division of the land (e.g. where would the castle be? where would the farming take place?)
- **Medieval Food Garden:** As a class, create a medieval food garden and grow vegetables similar to those found in the middle ages. Is it easy or difficult to grow your own food?
- **Ancient Civilizations Treasure Hunt:** Do a walk through the schoolyard to discover evidence of ancient civilizations in our contemporary lives. What building techniques were invented in the past that were used to construct the school? What plants or animals are found in our schoolyard that are also found in ancient times? Have them do some research to find out what connects our times to the ancients.
- **Medicine Wheel Garden:** Examine this garden as a class to better understand the aboriginal philosophy behind it (see the related info earlier in this guide.) What are the meanings of the plants, rocks, etc? Have the class do some research, and then design their own versions for different tribes across Canada.



Concert in the Hillside Garden on Earth Day 2008

Suggested Activities for the Intermediate Level

Language Arts

- **Reader's Theatre:** Enjoy a Reader's Theatre session in the Amphitheatre where students can come up to the stage and act out a favourite passage of their novel. Don't forget the popcorn!
- **Remember when?!** Ask students to recall their favourite memories of events or places in their schoolyard. Use these memories as the basis for a writing assignment, and then have them share their stories or poems with their classmates or a younger class at each special spot.

Math

- **Map It:** Create a scale map of the schoolyard. Make it from memory for the first draft, and then go outside a a class to create one to-scale, using a variety of measuring tools.
- **The Costs of Play:** Have the class examine how much it costs to install and maintain the grassy field in the Runnymede Yard. Have them measure it, calculate its perimeter and area, and then calculate how much it costs to purchase and install fresh sod, mow it, and buy fertilizer to maintain it.
- **Track It:** Conduct a full survey of the use of the playground. Use observation or survey methods to calculate how many students use each area of the playground each day and graph the results. How should this info effect how the playground is monitored and funded?

Visual Arts

- **Graffiti Mural:** Design a graffiti mural for the schoolyard. Students each sketch a plan for a mural commemorating their time at the school, and decide as a group which design is the best. Prepare a proposal for creating the mural to present to the principal, including the materials needed, a timeline and the costs involved. Take the proposal to school council and the principal for approval to realize the mural before they graduate.
- **Photo Essays:** Ask the students to bring in a digital camera from home. Give them instructions in camera use and or the composition of effective photos. Ask them to photograph the elements of their schoolyard that hold the strongest memories for them. Have each student design a Powerpoint presentation that brings together their photos and their memories. Share these with other classes as a special part of graduation.

Music

- **Musical Garden Tour:** Invite parents and/or younger classes to a musical garden tour. Have pairs or small groups of students playing music throughout the garden. Have student musicians select their playing site based on its relation to a piece of music or its unique acoustics.
- **Play It Again:** Have small groups of students perform at one of the Yard Days in the spring or fall. Share their talents with others as they tend to the garden.
- **Ode to the Hillside Garden:** Ask students to design their own 'Ode to the Hillside Garden'. Its rhythms, chords and tempo should reflect their exeriences over the years in this space.

Science

- **The Power of H₂O:** Investigate the effects of water in our schoolyard and the challenges it creates. Have student observe the yard after a heavy rainfall to see where water pools or erodes parts of the garden. Document this with photography. Knowing the properties of water, what solutions can they imagine?
- **Environmental Detectives:** Have the class take a walk through the schoolyard together to identify environmental challenges (e.g. excessive littering, erosion, compacted soil near trees, etc.) Interview the principal, caretakers or Yard Committee members to gather evidence about these problems, the scientific principles at work, and then write a report documenting the problems. The report should also contain a solution to the problem. The reports could be presented to School Council for funding to implement the solution.

History and Geography

- **Create a Quest:** Conduct historical research on the Runnymede property to investigate what was on the same parcel of land before the school was built. Who lived here; what were the geographic features? Identify the unique features or historical landmarks of our school site, and then design a treasure hunt or quest for other classes to discover these on their own. This integrated activity can include drawing or photographing of local landmarks, writing, and mapping.



Junior students working on art projects
in the Hillside Garden

Take your Class Outside for Art!

The following are ideas for primary or junior art projects that involve natural materials and/or settings in their creation. They can be modified as appropriate for any grade level. Keep in mind that with any art project, the process is of equal importance as the product; if the object doesn't turn out as initially imagined, it's just part of the fun. For detailed instructions on these or similar projects, refer to the books listed in the bibliography, or to specialty sites on the Internet.

Rain Paintings: Take painting paper and powdered paints outside on a rainy day. Arrange powdered paints in desired shapes on paper (using spoons or brushes,) and let the rain wet and mix the colours. Bring inside to dry.

Nature's Paintbrushes: Experiment with a variety of natural objects as paintbrushes using tempera or watercolour paints: leaves, sticks, feathers, rocks, dried flowers, horse hair, etc. Create a painting using many different paintbrushes to achieve a variety of effects.

Nature Rubbings: Take paper and crayons on a nature walk, and make rubbings of interesting textures along the way (tree bark, rocks, leaves, etc.) If done on small squares of paper, they can be strung together to make a wall hanging; if done on larger sheets, the textures can be cut up for collaged landscapes.

Stone Paintings: Small smooth rocks, brought from home or found on a nature walk, can be used as the surface for a painting. Paint a picture of a special natural place with acrylic paints or turn into small animals with the addition of fabric ears and tails. Also try inscribing with a memorable word (e.g. beauty, create) and then return to nature for others to experience.

Painted Totems: Using 2-3' logs standing on their ends, paint (rather than carve) images traditionally found on totem poles (eg animals, people, etc.) Feathers, branches, and fabric can be added for arms, wings, tails or beaks. This can also be done using large or small cardboard rolls.)

Natural Impressions: Roll out clay into small squares, circles or triangles. Press a natural object (e.g. shell, twig, flower, leaf, etc.) into the wet clay, and make a small hole in one side. Fire (if a kiln is available) or let air dry; glaze or paint as appropriate. Display by stringing through the small hole.

Ice Sculptures: Create a nature-friendly building out of ice. Fill old margarine tubs, buckets and other containers with water coloured with food dye. Leave outside overnight on a winter's night. Pop ice blocks out of the containers and use as building blocks.

Wildflower Cards: Lightly glue wildflower seeds to the front of a folded sheet of paper in a desired pattern or shape; add drawing around the seeds. Inscribe the inside, providing instructions to plant the card in the garden when finished with it. (This can also be done with grass seeds; just water the card regularly and put in the sun for grass to sprout.)

Branch Weavings: Use a small branch with a few branches coming off it as the base for a weaving. Weave wool, thread or fabric scraps in between the branches, then tuck other natural objects or miniature drawings into the weave. Display by hanging or standing in a container of sand.

Learning Activities on the Asphalt

The stone amphitheatre is being used by another class, as is the Hillside Garden, but your class loves to learn outside...what do you do? Even the asphalted areas of our schoolyard are great places to jumpstart learning. Here are a few ideas:

Science:

- Find ant holes and discover what types of ants live in which locations on the asphalt (See 'Ant Cafeterias' inquiry activity to discover what ants prefer to eat. (<http://www.ecostudies.org/syefest/ap1res5.htm>) Pull the info collected into a class ant book.
- Random sampling: throw out hula hoops in random locations on the asphalt. In pairs, students examine the area within their hoop: composition of the asphalt, plants and insects. Results from the samples can be compiled in a class chart or map.
- Take samples of insects to investigate their behaviour (before releasing them.) Use this info to create an 'Asphalt Field Guide' to document the plant/animal life found on the asphalt.
- Investigate where puddles form and where ice forms in the winter. Consider the water absorption and run-off in various locations of the asphalt. How could puddles/ice be minimized?

Literacy:

- Asphalt Poetry: write various types of poems (acrostic, haiku, limericks, etc.) in a variety of ways on the asphalt (using chalk, on paper weighted to the ground, bristol board secured to a tree/bench, etc.). The class can then take other classes on a poetry walking tour to review the various types of poetry and share their creations.
- Develop proposals (persuasive writing with an art component) for new asphalt designs (hopsotch, four-square, artful designs, greening, etc.)
- Write a story from the point of view of an insect or other animal they find on the asphalt (linked to Science activities). Read "Diary of a Worm/Spider/Fly" as examples of creative writing.
- Choose a 1m. x 1m. piece of tarmac and write a detailed description of that space. They then trade with a partner to see if they can find that particular location based on the quality of their description.
- Write an article for the school newsletter to report on the activities/games played on the asphalt at recess (use results from math survey described below).
- DEAR time or classroom stories on sit-upons/carpet squares/blankets on the asphalt.

Math:

- Survey activities/play that take place on the asphalt during recess. They can consider age/grade, gender, days of the week, areas of the asphalt that are busier than others, etc. The results can be presented in graphic form. They can survey the activities by season and see how play changes.
- Measure the area, perimeter, and thickness of the asphalt. Then map the whole school ground and compare the size of the asphalt in proportion to other play areas.
- Creative asphalt measurements: measure the width/length in footsteps, by children lying down head to toe, lining up student coats, using a trundle wheel, metre sticks, measuring tapes, etc.
- Treasure Map: Write specific, creative directions (i.e. crawl 2 meters east, hop 4 meters north, etc.) to lead other students to the 'treasure' they have found, left behind or created.

- Investigate and graph shade on the asphalt at different times of the day and across seasons. Does the yard need more trees to protect students during play? If so, how many and where?

Phys Ed:

- Fitness Stations: set up various stations whereby students rotate around (basketball, frisbee, skipping, hula hoops, etc.)
- Winter Outdoor Games (on asphalt and rest of school ground): Students research and plan a variety of outdoor winter games on various themes (i.e. Native Canadian winter sports). They can lead the activities for other classes in the school.
- Obstacle Course Race: Students can create and can use the fitness stations, track, raised areas and basketball courts to form a race course.
- Asphalt DPA: Students can lead the Health Hustle, their own aerobics/dance routines, yoga, Tai Chi, etc. on the asphalt instead of in the confines of the classroom.
- Prison Ball: Students stand in a circle and link arms. A ball is thrown in the middle and students kick the ball within the circle while trying to keep it from exiting the circle. If a student fails to keep the ball in, that student leaves the circle. Game proceeds until only a few students are left.
- Other games can include twister, hopscotch, tennis ball games, four-square, parachute, etc.

Art:

- Mapping the Ground: students place a small piece of an overhead transparency on the asphalt and trace everything in that space with a thin permanent marker – they can add colour with coloured markers or acrylic paint.
- Chalk Drawings: children can create their own art on the ground, and lead other classes on an outdoor art tour. Examples of street chalk art can be shown to the class as inspiration. Invite a street chalk artist to the class to share their art and expertise.
- Sound Maps: students sit in complete silence for 3 – 5 minutes (or more) and draw the patterns of the sounds around them (also relates to Science).
- Ant Trails: use chalk to follow and draw the pattern of an ant's movement.
- 'Art Attack': divide the class into groups and each receives a bin of various items (i.e. pieces of material, blocks, bottle/jar lids, rope/string, and other structure building materials). Groups are given a certain amount of time to create a work of art before sharing with the rest of the class.
- Draw or paint outlines of students to make a series of self-portraits. (Tempera paints last a few weeks but aren't permanent.)
- Design a sundial, maze, mural or labyrinth to be painted on the asphalt.
- Make a drawing to redesign the asphalted area of the playground.

Resources for Teaching in the Outdoor Classroom

Runnymede School Library Resources

Teaching About Trees: A Resource Kit. Toronto: Prentice-Hall, 1995.

Levicott, J. and Levicott, L. *Magical Migrating Monarchs.* 1993.

Page, K. *Earthrights: Education as if the Planet Really Mattered.* WWF, 1987.

Rose, D.L. *The People Who Hugged the Trees.* Rinehart, 1990.

Sobel, D. *Mapmaking with Children: Sense of Place Education in the Elementary Years.* Heinemann, 1991.

Sheehan, Kathryn and Mary Waidner. *Earth Child: Games, Stories, Activities, Experiments and Ideas about Living Lightly on Planet Earth.* Council Oak Books, 1994.

Selby, David. *Earthkind: A Teachers' Handbook on Humane Education.* Trentham Books, 1995.

Grant, Tim and Gail Littlejohn. Eds. *Teaching Green – The Middle Years: Hands-on Learning in Grades 6-8.* Green Teacher, 2004.

Grant, Tim and Gail Littlejohn. Eds. *Teaching Green - The Elementary Years: Hands-on Learning in Grades K-5.* Green Teacher, 2005.

Thornhill, J. *A Tree in the Forest.* Greey de Pencier Books, 1991.

Burford, D. *The Magical Earth Secrets.* Western Canada Wilderness Committee, 1990.

Burford, D. *The Magical Earth Secrets: Environmental Activity Guide.* Western Canada Wilderness Committee, 1990.

McCalley, D. *Outlook: The Earth.* Iowa Natural Heritage Foundation, 1994.

Fifty Simple Things Kids Can Do to Save the Earth. The Earthworks Group, 1990.

Dohr, R. and Bazar, R. *Good Planets are Hard to Find: An Environmental Info Guide.* Earth Beat Press, 1989.

Gwen Diehn et al. *Nature Smart: Awesome Projects to Make with Nature's Help.* Sterling Publishing, 2003.

Cornell, J. *Sharing Nature with Children: A Parents' and Teachers' Nature-awareness Book.* Ananda Pub., 1979.

Clare Matthews. *Great Gardens for Kids.* Sterling Publishing, 2002.

- Clare Matthews. *How Does Your Garden Grow? Great Gardening for Green-fingered Kids*. Sterling Publishing, 2005.
- Hickman, P. *Bugwise*. Kids Can Press, 1990.
- Hickman, P. *Birdwise*. Kids Can Press, 1988.
- Hickman, P. *Plantwise*. Kids Can Press, 1991.
- Cudato, Michael and Joseph Bruchac. *Keepers of the Earth: Native Stories and Environmental Activities for Children*. Fifth House Publishers, 1989.
- Laurie Carlson. *Ecoart! : Earth-Friendly Art and Craft Experiences for 3-To 9-Year-Olds*. Williamson Publishing, 1992.
- MaryAnn Kohl & Cindy Gainer. *Good Earth Art: Environmental Art for Kids*. Bright Ring Pub.,1991.
- Smith, R. *Strands in the Web: 201 Activities for Teaching Environmental Awareness*. Pippin Pub., 1994.
- Towards an Ecozoic Curriculum*. Ontario Society for Environmental Education, 1995.
- Pike, G. and Selby, D. *Global Teacher, Global Learner*. Hodder and Stoughton, 1988.
- Morris, K. *The Kids Jumbo Book of Gardening*. Kids Can Press, 2000.

Digital Resources

TDSB's Ecoschools Program

<http://www.tdsb.on.ca/site/ViewItem.asp?siteid=207&menuid=1425&pageid=1052>

Evergreen's Teacher Corner

<http://www.evergreen.ca/en/lg/lg-teach.html>

Green Street

http://www.green-street.ca/home/index_e.html

Ecokids

<http://www.ecokids.ca/pub/index.cfm>

Canadian Network for Environmental Education and Communication

<http://www.eecom.org/>

Resources for Rethinking

<http://www.r4r.ca/>

Green Learning

<http://www.greenlearning.ca>

Acorn Naturalists

<http://www.acorn-group.com/index.htm>

Green Museum

<http://greenmuseum.org/>

Kids' Gardening

<http://www.kidsgardening.com/>

Ontario Society for Outdoor Education

<http://www.coeo.org/aboutus.htm>

Ontario Society for Environmental Education

<http://osee.com/>

International School Peace Gardensfooters

<http://www.ihtec.org/index.php?id=77>

Acknowledgements

The Runnymede Schoolyard has been created and maintained over the last two decades through the vision, planning and hard work of many teachers, students and community members – this schoolyard wouldn't not have been possible without them! A special thanks must go Anne Lakoff however, as one of the founding teachers involved in this work; her dedication and ongoing support of the development of this rich learning resource over two decades has been invaluable and inspiring. Thanks also go to the past Chairs of the Runnymede Schoolyard Committee for their contributions: Karen Yukitch, Marshall Leslie, Dori Hawkinson, Kshama Patel, Sandra Franke, Carolyn Bloomer, Carol Walmsley, Anne Bell, Hilary Inwood, Bruce Toner, and Sarah Frame.

Authors of this guide: Hilary Inwood, Karen McGill, Anne Lakoff

Editor: Sarah Frame

All material and photographs are the copyright of the authors and school; please contact for permission to reproduce these in part or full. @ 2009



Upper pathway in the Hillside Garden in fall