JUNE 2017 SITE LINES Landscape Architecture in British Columbia

GROUNDS FOR PLAY: DESIGNING FOR CHILDREN'S PLAY

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The purpose of Sitelines is to provide an open forum for the exchange of ideas and information pertaining to the profession of landscape architecture. Individual opinions expressed are those of the writers and not necessarily of those of the BCSLA. GROUNDS



Susan Herrington, MBCSLA, Professor and Chair, Landscape Architecture Program, The University of British Columbia

Designing for children's play

The popular African expression, "It takes a village to raise a child," is an applicable proverb for designing children's landscapes. We need a constellation of different professionals to realize quality outdoor play spaces. From the landscape architects who develop the designs, to the municipal authorities who ensure they meet regulations, to the park technicians who work with community priorities, to the educators who use the spaces with the children, to the researchers who study how the design effects children's development and learning–a myriad of perspectives are needed to ensure quality outdoor play spaces.

For this edition of SITELINES, the authors hail from, not only landscape architecture, but also education, child care, social planning, parks, and injury prevention. Opening up the discussion, Mariana Brussoni, who works in the Injury Prevention Unit at the UBC Faculty of Medicine, reminds us that the obsession with safety in the design of play spaces is not justified by actual injury statistics. Shelley Long, BCSLA Intern at Hapa Collaborative, follows up with the charge that play spaces in multi-family residential landscapes don't need to look like standard play equipment, but should instead inspire imagination and risk taking. Landscape design technician, Chandra Lesmeister describes design strategies used by the City of North Vancouver to foster quality play spaces in a range of environments. Mark Pickersgill, a Social Planner with the City of Vancouver, advocates for sensitive site planning when locating child care centers and the incorporation of nature in outdoor play spaces that are often unnatural environments. Deb Thomspon and Melanie Waters, both with UBC Child Care Services, bring the early childhood educator's perspective to the fold. They stress not only the importance of risktaking, but also "whiling" in outdoor play. Susan Gerofsky, who is an assistant professor in Mathematics and Environmental Education at UBC, reveals the deep connections between math and learning gardens. Lastly, I profile Cornelia Hahn Oberlander, and her 60+ year career designing landscapes for children.

We hope readers find these diverse perspectives informative when designing and planning for children. Many thanks to the contributing authors and BCSLA staff for their support. SL



Cover Image: Play space at UBC Orchard Commons by Hapa Collaborative. Credit: Susan Herrington

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Safety First? Dr. Mariana Brussoni, Faculty of Medicine, The University of British Columbia

Not long ago, the sound of children playing outside was a regular fixture on most residential streets and children took it for granted that they would be allowed to play outside until the street lights came on. These days, children on the streets are an endangered species and parents who want to send their kids outside fear that their child will be hurt or abducted, or that someone will call social services.

The reasons for this rapid shift are complex and multi-faceted, due in part to changing perceptions of what it means to be a "good" parent, and technological advancements that have made screens highly enticing, as well as venues for alarmingly regular news reports of horrible events befalling innocent children around the world. My profession of injury prevention can also take part of the responsibility for the rise in this culture of fear. As we learned more about injury patterns, we improved our ability to predict and prevent them. For the most part, this was a very positive development. Injuries are the leading cause of death for Canadian children and we have made some incredible advances in reducing their burden, particularly related to motor vehicle crashes. The problem lies in grounding injury prevention efforts in the perceived need to minimize exposure to risks, equating risk with harm or danger. While this approach can be useful for many contexts, such as in the workplace or on the roads, when applied to children's outdoor play, it can result in injury prevention interventions that impose excessive restrictions on children's play. These restrictions have been particularly evident when it comes to children's risky play, which is considered exhilarating play where children actively engage with uncertainty. It can include playing at heights, at high speed, with tools (e.g., knives, ropes), elements (e.g., water, fire), play fighting, or



independent exploration. Recent research has identified the importance of risky play for children's physical and mental health and development.

Parents and other caregivers have heard that they need to supervise more, while landscape architects and play space providers have seen the development and implementation of Canadian Standards Association's Z614 standards for children's playspaces and equipment. The standards have the primary goals of promoting cross-border trade and risk reduction, while children's developmental and play needs tend to be an afterthought. Despite these important shortcomings, these standards are being applied as policy and design guidelines in municipalities across Figure 1. Leading causes of injury hospitalization, British Columbia, 2013/14, males and females, ages 1-14, combined counts (crude hospitalization rate per 100,000).

Canada, resulting in uniform play spaces with limited play value – what Helen Woolley, BSc, BPhil, CMLI, termed KFC (Kit Fence Carpet) playgrounds. Research in childcare centres and schools has raised concerns that overly strict standards have rendered outdoor play areas unchallenging and uninteresting to children, hampering their physical activity and resulting in some children using the equipment in unsafe ways to maintain challenge. ►

CAUSE OF INJURY	NUMBER OF INJURIES	RATE/100,000 POPULATION
Fall involving playground equipment	331	52.2
Fall on same level	182	28.7
Fall involving skates, skis, skateboards	153	24.1
Fall involving bed, chair and other furniture	104	16.4
Fall from high level	56	8.8
Fall on and from stairs/steps/ladder/scaffolding	52	8.2
Fall involving wheelchair and other walking devices	9	1.4
Fall involving ice and snow	9	1.4
Other and unspecified Fall	257	40.5

Table 1. Leading causes of fall-related injury hospitalization, British Columbia, 2013/14, males and females, ages 1-14, combined counts (crude hospitalization rate per 100,000).

British Columbia's injury statistics suggest that the fears that have led to the curtailing of children's outdoor and risky play are largely unfounded. First, the likelihood of a child getting kidnapped by a stranger is about 1:14 million (about the same as winning Lotto 6/49). Second, a child is eight times more likely to die as a passenger in a car than as a pedestrian or riding a bike. Third, Canadian mortality statistics over a period of twelve years show only one death from falls from play equipment and no deaths from falls from trees. British Columbia's hospitalization data indicate that falls from play equipment are one of the leading causes of injury-related hospital admissions, as seen in Figure 1 and Table 1. However, when closely examined, it is apparent that the numbers remain relatively small (331 injury hospitalizations during 2013/14 among 634,016 children in BC). Furthermore, 91% of these injuries are fractures or dislocations, which are rarely considered "serious" from a medical standpoint. Another important consideration is the likelihood of injury when taking into account the time that children spend in outdoor play. A recent review of the available research indicated that children would have to play outside for 3 hours per day for approximately 10 years to log enough exposure time to have one medically-treated (and likely minor) injury. In sum, the limitations we are putting on outdoor play are not justified based on the injury statistics. Yet there are considerable potential negative effects that these limitations can have on children's health and development, such as limiting development of risk management and problem solving skills, social behaviours and self-confidence, as well as discouraging physical activity.

Concerns about the status quo have resulted in efforts by non-governmental organizations and academics to develop resources that may be of use to landscape architects to help redress the imbalance. The Position Statement on Active Outdoor Play (https:// tinyurl.com/playpositionstatement) resulted from examination of the research evidence, as well as broad multidisciplinary input. Launched in June 2015 as part of ParticipACTION's Report Card on Physical Activity for Children and Youth, it includes a brief summary of the supporting research and recommendations for action from relevant sectors. Importantly, the Position Statement was cited in a BC Supreme Court decision on a lawsuit prompted by a playground-related injury to a child at a summer camp. The ruling concluded that "rules and regulations designed to prevent injuries and reduce tort liability have become excessive and counter-productive to youth health and fitness" (http://www.courts.gov. bc.ca/jdb-txt/SC/15/17/2015BCSC1750.htm). The case that prompted the suit was dismissed, with the judge ruling that the District was not at fault for the injury the child received while in its care.

Another resource is the approach to risk assessment developed by the UK's Play Safety Forum. Their Risk Benefit Assessment process is designed to consider the benefits of challenging play experiences in addition to examining the risks of a play space (http://www.playengland.org.uk/resource/ managing-risk-in-play-provision-implementation-guide/). The Child and Nature Alliance of Canada is currently leading an effort to modify this resource for the Canadian legislative context and has implemented a pilot version in the Forest School Canada program.

A third resource addresses parents' fears and anxieties around letting their children play outside. The Outside Play online tool (https://outsideplay.ca/) takes parents through a series of experiential learning tasks designed to reframe their attitudes toward risky play and apply the ideas to develop a personalized plan for making changes to their approach. It includes a workshop facilitator guide for users to offer Outside Play as an in-person workshop to help shift the mindset of communities who they are working with to provide outdoor play opportunities.

We are experiencing an unprecedented curtailing of children's outdoor and risky play that is already having significant ramifications for children's health and development. Landscape architects, as designers of built environments and play spaces, are central partners in the society-wide efforts that are necessary to improve outdoor play provision. Each of us needs to work within our respective disciplines to affect a change in the current mindset in which decisions about children's outdoor play space design are grounded in fear of injury, uncertainty and liability. We also need to tackle this issue together, learning from and building off each other. As a researcher, the practitioner perspective is invaluable to ensure that my work is relevant, applicable and useful to the real world. Likewise, I would encourage landscape architects to get involved in research, using it to influence designs, as well as to actively pursue answers to questions that can help us do a better job of providing children with high quality outdoor play spaces and experiences. SL

IT DOESN'T LOOK LIKE Play Equipment shelley Long, BCSLA Intern, Hapa Collaborative

In the City of Vancouver, new multi-family residential developments with family-oriented units are required to include shared outdoor play spaces for children. The aim is to provide a 'variety of experiences' for 'active and quiet play, for group and individual play, for structured and creative play" for children of different ages.

(High-Density Housing for Families with Children Guidelines, City of Vancouver, March 21, 1992, pages 5-6)

Most of these developments prioritize maximization of FSR and indoor floor space, leaving very limited areas for outdoor play, which is often situated on rooftops, and almost always over a concrete slab. These buildings are owned and maintained by private strata or property management companies, and so are not accessible to the public. Conventional off-the-shelf play equipment, such as slides, spring toys, and climbers, along with their designated fall zones, often do not fit, or if they do, do not foster a creative, challenging, nor fun play experience. Taking that approach, children of the condos of tomorrow would be faced with one-off-the-shelf spring toy and square sandbox after another in a field of safety surfacing. Given the limitations on construction methods and space, creative custom solutions are necessary. Green roofs are yet another niche ecosystem in the inventory of childrens' habitats. As shared rooftop amenities become more commonplace and desirable, they must be conceived as spaces for children: "experience has shown that children will play everywhere; the entire site should be designed to withstand use by children." (City of Vancouver, pg 5)

Creative play environments are ones that encourage imagination and risk-taking, and they do not need to look or function like conventional play equipment. While exercising due diligence to ensure accessibility and safety, designers should consider how the children's area functions with the intent of standard safety measures equally with the intent of the quality of the greater residential landscape design in mind.

Large slices of salvaged logs polished to look like giant eggs protruding from a hillside blend with the tactile and aesthetic qualities of a Japanese garden, which to a child, could be a range of islands, planets, or launch pads to climb, jump, run around, and create stories. Covered space provides options for

shelter from sun and rain for both children and adults. This can make or break whether the space is used at all in a climate such as Vancouver's, with rainy winters and hot summers. After all, outdoor play spaces have different advantages over indoor ones: in that they provide an opportunity for play and exercise in fresh air, to connect children with natural materials and systems, atmospherically, or even metaphorically. Natural elements, such as air, water, mud, plants, and sand, can be used in the play area design as much as any other piece of landscape architecture. Loose material, like cut pieces of logs, sand, bark, (non-poisonous) plants, gravel, and water, are all landscape elements that will give children the freedom to create with an endless imagination either alone or together. A screen or fence can become a soundboard, and a public art contribution could double as an interactive environment to make friends instead of acting as a giant 'do not climb' sign. ►

Rendering of a play area designed to mimic a birds' nest.

Image credit: Hapa Collaborative

Working with developers and architects to co-locate the creative play spaces along with other outdoor amenities such as dog runs, outdoor kitchens, and urban agriculture, also helps create an intergenerational atmosphere. Parents and grandparents can socialize, sit, or garden while supervising their children, and the entire shared space becomes a big backyard. Well designed spaces for multi-family developments help create community, which for children, means forming relationships with children and adults of different ages, and giving them activities at home that are not associated with staring at a screen. Leaving space for kids to spread out, modify their environment, and bring their own toys could also help contribute to their sense of ownership over the space and belonging as they grow up. As more and more families live in condos, by choice or necessity, these private play spaces are added to the network of child care facilities, parks, and schoolyards that make up the urban fabric. The fenced in patches of lawn of the single family home are now replaced with a cohesive landscape in and around a condo



Children playing with natural and loose material in Vancouver, BC. Photos by Hanako Amaya.

development, which is shared. In designing for families at home, we might begin by asking how a child would use their garden, rather than reaching for a catalogue. **SL**





SUPPORTING PLAY in the Landscapes of NORTH VANCOUVER

Chandra Lesmeister, MBCSLA, Landscape Design Technician

At the City of North Vancouver, we strive to provide children with unique outdoor play experiences in neighbourhood parks, along trails, and in our natural areas. Quality play that is child initiated and child directed can offer the child sensory, physical, emotional, and cognitive experiences in these outdoor environments. Some common strategies we use to foster quality play experiences include loose parts, and graduated challenges, and supporting play where it occurs outside of the typical playground environment.

Loose parts are manipulative and transformative elements that children to use to shape their environment. When the child is free to create a play narrative using physical pieces, their play is sustained for longer periods of time. In Chief Dan George Park, a neighbourhood park bordered by single family homes, there is evidence of children moving logs, utilizing stumps and creating their own paths through the dense, overgrown understory. For the redesign of this existing park, we are keeping these important "messy" edges ►





Previous page: Kealy Woods Park — child's den. Above left: Chief Dan George Park — messy edges. Above: Chief Mathias Joe Park – designed by space2place.

and adding another layer of manipulative opportunities with sand and water play areas. This will be the first park where we will provide a place for children to store and collect loose parts that they may want to bring from home and leave in the park.

Graduated challenges allow children to physically and emotionally test their abilities at their own readiness. This introduces an element of risk, which is critical for the child's emotional and physical development. At public open houses, we have learned from families that they want children to continue to find new challenges in their local parks as they grow and master new skills. Chief Mathias Joe Park was one play space that many families said appealed to toddlers for a short period of time but did not offer enough engagement or challenging physical elements as children grew. To address this concern, we added more topography and open ended climbing structures as a means to provide challenge to infants, toddlers and older children.

At the City of North Vancouver, we also recognize that play is not limited to playgrounds. We have seen evidence of quality play and children's creative expression in some of our natural area parks. For example, during a restoration project in Kealy Woods Park, we found that children had been using stumps and forest understory to create dens and play spaces. Our role to help support this type of play was to improve access to the park with upgrades to the trail system. We also promoted environmental stewardship of the park through a partnership with a neighbourhood school. Over the span of several months, school children learned about the unique habitat of the park, removed invasive plants from the park, and replanted areas with native plant species.

Laneways are also common places of play for children. With the area-wide rezoning of the Moodyville Neighbourhood, we had the opportunity to draft laneway design guidelines for the new housing developments. The draft guidelines are inspired by the 1960's DutchWoonerf, or "livingstreet" model where neighbourhood zones function as shared public space between pedestrians, cyclists, slow moving traffic and children. Similar to the common European Woonerf model, the City's guidelines incorporate play, social and recreational opportunities into the lanes. The intent is to foster children's freedom to initiate play just outside of their door and within a neighbourhood framework that supports these valuable experiences.

Although we consult with the community in the early stages of project initiation, we don't always return to the community for feedback after project completion. Currently, we are in the process of formalizing post occupancy evaluations of our recent park projects to gather insight from children, the community, and City Operations. This information will be invaluable as we continue to make improvements in our parks to support meaningful play experiences for children. **SL** THE CASE FOR

Mark Pickersgill, Social Planner, City of Vancouver – Social Policy & Projects Division

Designing Outdoor Spaces in Child Care Facilities

As a Social Planner at the City, my work in child care synthesizes aspects of community planning, licensing and regulation, architectural design, landscape architectural design, project management, and child care advocacy. While not formally trained in landscape architecture or early childhood education, I nonetheless work alongside architects, landscape architects, developers, child care operators (non-profit and for-profit), Provincial licensing officers and a host of other stakeholders, with the expressed aim of effecting positive and measurable impacts on child care accessibility, affordability and quality throughout the city. While it is beyond the scope of this short piece to discuss accessibility and affordability in child care, it is nonetheless important to recognize how the City of Vancouver supports the development of quality child care, through design.

One of the most enduring and effective tools the City of Vancouver has for addressing quality in child care facilities comes in the form of the City's Childcare Design Guidelines. Approved by Vancouver City Council in 1993, the intent of the Childcare Design Guidelines is to ensure the development of quality urban child care facilities, insomuch that quality child care can provide children a range of opportunities for social, intellectual and physical development.

The guidelines address quality most directly through attention to elements such as:

SITE SELECTION AND PLANNING (some sites are better suited for child care such as: those with connections to nearby green space; those with orientations away from heavy traffic; those with opportunity for contiguous indoor/outdoor play, and those that have direct access to ample, natural light); ►



INDOOR AND OUTDOOR DESIGN (the design of both indoor and outdoor spaces can have measurable and direct impacts on the social, intellectual, and physical development of children);

SAFETY (the guidelines address safety in a myriad of ways, including consideration of sight-lines for child supervision, requirements for the use of materials that will not pose hazards, and ensuring that a facility is secure from unwanted access as well as any unplanned escapes).

One specific way the guidelines address quality in child care is through the strong emphasis placed on the outdoor environment and opportunities for children to connect with the natural world. In this respect, the Childcare Design Guidelines are supported by a growing body of scientific evidence that identifies links between the physical design of both indoor and outdoor spaces and healthy child development. Yet, the practical application of the guidelines, particularly addressing outdoor space, can be a source of tension.

Outdoor space design for childcare facilities can be complex, nuanced and very site specific. Vancouver's tight real estate market, coupled with the city's density, also pose some specific challenges. In regards to outdoor space, the Childcare Design Guidelines include requirements for direct/ contiguous access to ample outdoor space, specifications for adequate sunlight exposure, and a range of other considerations concerning outdoor space planning, including the incorporation of plants and natural materials, and other landscape provisions. Although largely a function of site selection and the availability of space, achieving and designing for the amount outdoor space specified in the guideline can be a nuanced challenge (particularly in a dense urban environment like Vancouver) in and of itself. As it happens, it has become increasingly common to find new child care centres located on top of building rooftops and on tower podiums. This has proven to be a perfectly logical, if somewhat imperfect, response to a general lack of space in some areas of the city. The resulting challenge for landscape architects and





Previous: Bob & Kay Ackles Nanook House (YMCA). Photo Credit: City of Vancouver. Landscape Design: Sharp + Diamond Landscape Architecture. Play Structures: Paul Dirks.

Above: Terry Tayler Early Learning and Care Centre (Collingwood Neighbourhood House). Landscape Design: DMG Landscape Architects. Photo Credit: City of Vancouver

Left: Djavad Mowafaghian Child Care Centre (YMCA). Photo Credit: Alyssa Semczyszyn, B.LA, MBCSLA. Landscape Design: Jonathan Losee Landscape Architecture. Play Structures: Paul Dirks

designers working with child care facilities that are above grade, or are situated in other spatially constrained locations, is the ability to bring nature into what are ostensibly unnatural environments. At the same time, these spaces need to be designed to ensure both optimal health outcomes for children and operational feasibility for child care operators.

Based on my professional and personal experiences with child care, I think it is fair to say that the complexity and specialized nature of child care design are often underestimated. And while the City of Vancouver's Childcare Design Guidelines are extensive, they are not comprehensive, nor are they an absolute determinant of quality. Landscape architects are nonetheless in an excellent position to push the "quality" dial forward, to help fill-in gaps (particularly in jurisdictions that may not have an equivalent to the City of Vancouver's guidelines) and to develop innovative new practices in child care design. By leading the conversation around things such as risk in children's play, as well as continuing to strengthen the links between health and landscape design, landscape architects and designers have a critical role in connecting children to the natural world. SL

Place Deb Thompson, Manager of Children's Programs,
Child Care Services, Student Housing and Hospitality Services,
The University of British Columbia Possibility Deb Thompson, Manager of Children's Programs,
Child Care Services, Student Housing and Hospitality Services,
The University of British Columbia

Question: What do you look for in providing children with quality outdoor experiences?

At the University of British Columbia Child Care Services we hope to maximize children's freedom to play, to engender their respect and responsibility for place, and to support their resilience, their connections to others, and their learning. We often engage with landscape architects, sometimes at the design phase and, ideally, throughout the actual construction process. Frequently the designer also builds the space. This allows flexibility and change throught the construction phase. We also work with our licensing body throughout the project start to finish as we must adhere to various regulations.

UBC Child Care Services operates twentysix child care centres and each one includes a large attached outdoor play space. In those spaces, we wish to invite children to be curious, to move, to take risks, to wonder, to explore, to imagine and create, and most of all to play - alone and with others. Our lofty ambitions require that our environments, including outdoor spaces, be challenging, transformable and inspiring, messy, unique and filled with quiet hidden places of contemplation. They cannot be so safe that they are sterile., nor can they be so planned and fixed that they lack spontaneity. To produce such spaces we have moved away from a reliance on manufactured play equipment and immovable structures toward spaces that include "natural" elements like stumps, rocks, water, sand and dirt alongside "made" materials, such as porches, decks, ladders, moveable paraphernalia, "loose" parts and found objects. We do not build traditional playgrounds with climbers and swings and slides anymore, although we recognize the value of those familiar structures. Rather we focus on play grounds containing a variety of durable natural elements, open ended structures and loose parts.

For example, the play yards at UBC, contain meandering pathways, climbable trees, boulders and a small hill scattered with shrubs and other plants. Open-ended structures consist of shelters (built or created with large sticks or small logs), climbable entities (malleable living willow) and water ►





Play space at UBC Orchard Commons by Hapa Collaborative. Images: Susan Herrington

containers (rain barrels, hoses and taps). Loose parts include a variety of planks, logs, stumps, ladders, sticks and stones. These portable materials allow children to transform the play space in ways that suit their ever-changing desires as creativity flourishes. We believe these elements elevate the playability of a play space.

Two further ideas influence our evaluation of children's outdoor experiences: Ellen Sandseter's description of risky play and David Jardine's concept of "whiling". Sandseter explains risky play as "thrilling and exciting forms of play that involve a risk of physical injury." She suggests that risky play benefits emerging risk assessment abilities and, as well, supports overcoming fears, and mastering challenges. Jardine describes the other concept, whiling, as lingering over a topic or idea, "working at it, composing ourselves over it, remembering and cultivating one's memory of it." Whiling can create connectivity and deeper meaning between the children's feats and their surrounding environment. We value places that offer children the freedom of risky, thrilling play alongside other places that hold time to linger, to dream and to wonder.

A contemporary early childhood pedagogy posits that transformable environments can be rich with pedagogical possibility, in the words of Lella Gandini: "in order to act as an educator for the child, the environment has to be flexible: it must undergo frequent modification by the children and the teachers in order to remain up-to-date and responsive to their needs to be protagonists in constructing their own knowledge." To answer the question that led to this article, at UBCCCS we aim to co-construct, with children, families, early childhood eductors, regulators and designers, flexible, sometimes risky, sometimes tranquil outdoor environments that support and sustain our pedagogical values of freedom and responsibility, respect and curiosity, resilience and empathy, autonomy and connection, and learning and caring. SL

Leanning GARDENS Dr. Susan Gerofsky, Assistant Professor, Mathematics and Environmental Education, University of British Columbia

My work in both mathematics education and environmental education is about embodied, multisensory learning. I am interested in helping teachers gain confidence in getting kids outdoors, using all their senses and bodies in motion as cognitive resources, engaging school gardens and other outdoor spaces as places to teach and learn. This work always involves learners in hands-on activities, playful experimentation via the arts, growing plants for food and art materials, and celebrating with food we harvest and things we make.

I work collaboratively with a team of graduate and undergraduate students from the faculties of Education and Land and Food Systems, and the School of Architecture and Landscape Architecture at UBC. As a team, we design and care for several learning gardens on campus and run programs with teacher candidates, elementary school classes and UBC classes. The UBC Orchard Garden is one of these learning garden spaces. It is a 400 square metre studentled garden and orchard on the Point Grey campus. Over 500 UBC students each year are involved in programming at the Orchard Garden. They experiment with teaching and learning across the curriculum in a garden-based outdoor classroom, while at the same time learning about garden design and stewardship of soil, plants and pollinators. The Orchard Garden and two other campus learning gardens (Landed Learning at the UBC Farm, and Roots on the Roof) have formed an alliance called the Cultivating Learning Network, to share resources and knowledge.

Learning garden spaces are treated not only as outdoor classrooms but also as co-teachers. Rather than replicating the indoor classroom outside, and bringing its desks, whiteboards and screens out to the garden, we work on designing the school garden and playground so that everyone is learning from one another and from this place where everything is alive.

Of course, learning does not only take place in formal schooling, but also through play and community in informal/ non-formal spaces. Much of this learning is prompted by curiosity, a sense of wonder, unexpected and unpredictable happenings observed in the natural world, and a sense of interconnectedness and context. From my research in embodied learning, an important finding is that the best learning happens when learners engage fully with the things they are learning about, with mind, body, emotions and imagination. For example, when students were learning about graphs of functions in math class, those who engaged whole-body movement in gesturing the shapes of graphs, and who could use rich metaphors to describe the graph, were also the top math students in their classes, bringing both precision and creativity to their learning. These students were not just seeing the graph, but being the graph.

In the context of outdoor learning, a similar full-bodied, full-self engagement with the living world supports deep learning. Students who can imagine themselves being what they are learning about (the soil, the mint plant, the earthworm, the sun's track through the sky in different seasons, the flax that becomes linen or the wheat that becomes bread) can also develop depth of understanding about mycorrhizal networks, plant taxonomy, fractal geometry, the importance of pollinators, astronomy, and medieval history, among other things. There is also great satisfaction in working with hands and minds in an integrated way and developing competencies in everything from growing and cooking food to nurturing living creatures (plants, bees, earthworms, even chickens), to weaving a basket or a hat you can use.

For landscape architects, these kinds of learning gardens offer brilliant opportunities to shape spaces that support children's learning, along with some very basic challenges to the traditional roles that designers might take. Learning gardens, at schools, in parks and in other public spaces, need thoughtful professional design of varied terrains and siting; perimeter treatments like hedges, walls and fences; gateways, pathways, arbours and trellises; and places to make and display artwork generated by learning projects (sculpture, living fences, fibre arts, poetry and writing, garden-grown musical instrument installations, etc.). School boards and park boards have rules around the construction and maintenance of learning gardens that teachers and communities may not understand. Landscape architects' expertise in designing and building with materials in outdoor spaces is essential to a learning garden being welcomed and integrated into communal spaces. Learning gardens benefit from the use of colour, scent, light and shade, levels, textures, and spaces that allow for large and small movement (running, rolling, crawling, planting, climbing), meeting and talking, and even relaxing and dreaming while watching and listening to birds, insects and the wind.

At the same time, learning gardens must leave space for learners and teachers to do hands-on experimentation with planning, planting, tending and harvesting the garden, having maker spaces (a shed, greenhouse, rain-sheltered workshop) and space to make everything from sundials and labyrinths to beehives and mathematical sculptures. An ideal learning garden includes many un-designed spaces of possibility and imaginative potential within a thoughtfully-designed overall space. Children need quiet places for contemplation, mysterious places for story-telling and imaginative play, sunny spaces for growing things, open spaces for running and chasing, and places to take risks like climbing, balancing and working with sharp tools with developing skill and trust in their own competence. There is a fine balance needed between designed, professionally-tended spaces and experimental places for children's hands-on work, which foster wonder and curiosity and a realization of the interconnectedness of the living world.

There is an emergent grassroots movement for learning gardens worldwide. The nature of these learning gardens differs according to the bio-cultural diversity of the particular places, and may range from large-scale agriculture to historical medicinal gardens to meditation gardens. Connections among these learning gardens are beginning to stimulate exchanges and sharing of ideas across contexts about children's quality outdoor play and learning experiences. Landscape architects of British Columbia are well placed to contribute significantly to these exchanges through their thoughtful, collaborative designs of learning gardens. SL



CSLA Fellows

Induction to the CSLA College of Fellows is one of the highest honours the Society bestows on its members. It is our intent to include two CSLA (BC) Fellows profiles in each Sitelines that will connect with the theme and share stories of how our Members found and exemplify the profession. This month, we are proud to feature Cornelia Hahn Oberlander, who has dedicated much of her career to designing quality play for children. When we nominate Members to the College of Fellows we should be looking for members who have led the way by demonstrating excellence via executed works and served the profession while educating emerging professionals. Cornelia has set a very standard, and one we should try to maintain.

PROFILE OF

Cornelia Hahn Oberlander oc, LMBCSCLA, FCSCLA, FASLA

Susan Herrington, MBCSLA, Professor and Chair, Landscape Architecture Program, The University of British Columbia

Cornelia Hahn Oberlander is undoubtedly Canada's most prolific female landscape architect. Since opening her Vancouver office in the 1953, she has designed numerous parks, urban plazas, playgrounds, courtyards, and rooftop gardens that have fused her visionary integration of art, the environment, and social need. A small sample of Oberlander's award winning projects include her celebrated playground design at the Children's Creative Centre for Expo 67 in Montréal, the landmark urban plaza at Robson Square in Vancouver (1973-present), hanging gardens for the Canadian Chancery in Washington, D.C. (1989), the rooftop garden at the Canadian Consulate in Berlin (2005), the courtyard for the New York Times building in New York (2007), the VanDusen Botanical Garden Visitor Centre landscape and rooftop garden (2011), and most recently the landscape for East Three School in Inuvik (2013).

Oberlander's ability to combine art and natural systems, and her deep commitment towards social issues and ecology have captured the imagination of a growing Cornelia Hahn Oberlander with David Johnston, Governor General of Canada. Photo credit: MCpl Vincent Carbonneau, Rideau Hall, OSGG. © OSGG, 2016.



number of emerging landscape architects as well as people outside of the professional community. Oberlander is a member and officer of the Order of Canada, and she has won the ASLA Medal from the American Society of Landscape Architects in 2012, the Margolese National Design for Living Prize from the University of British Columbia in 2015, the Sir Geoffrey Jellicoe Award from the International Federation of Landscape Architects for 2011, and the Inaugural Governor General's Medal in Landscape Architecture for 2016. Her most recent award has been the Landscape Architecture Foundation Medal for 2017.

A reoccurring theme in Oberlander's work is her dedication to children, an interest

that resonates with this issue of Sitelines. Oberlander's interest in landscapes and children dates back to her own childhood. Her mother, Beate Hahn, was a horticulturalist, a widely read author of gardening books for children, and one of the first twentieth-century interpreters of Fredrich Froebel's (inventor of the kindergarten) work that sought to include of the natural world in the spaces for children's learning and development. Oberlander helped her mother render many of her well-known books, and is currently translating one of her German books into English.

As a recent graduate of Harvard University's Graduate School of Design, Oberlander worked for the Citizens' Council on City Planning (CCCP) in Philadelphia, as a Community Planner starting in 1951. The CCCP was one of first organizations in the US specifically established to create citizen's participation in the urban design process. One of Oberlander's first playground designs was the 18th & Bigler Street City Playground (1952-1954) for the Department of Parks & Recreation in Philadelphia. The project was so enthusiastically embraced by city official that it was featured in Life Magazine's September 1954 issue.

Once established in Vancouver with her husband, Peter Oberlander, she continued her commitment to children and the landscapes where they play. In 1955, Cornelia Hahn Oberlander gave the keynote lecture "Parks, Playgrounds and Landscape Architecture" for the Canadian Society of Landscape Architects and Town Planners conference in Toronto. This lecture was published in Community Planning Review Volume 4, no. 1 March 1956: 4-12. She also directed her attention to designing play spaces as part of housing projects funded through the Canada Mortgage and Housing Corporation, such as McLean Park Low Rent Housing (1960-1963) and Skeena Terrace Low Rent Housing (1961-1965), both in Vancouver. In 1968, Oberlander designed an extraordinary play space for the North Shore Neighbourhood House, which won an Award of Merit from the Canadian Society of Landscape Architects (1969). Between 1969-1974, she designed playgrounds for eight schools in Vancouver and for the play spaces at UBC Child Care.

Indeed, for every decade of the past 60 years, Oberlander has designed landscapes for the children of British Columbia. Oberlander designed an adventure playground for York House School in Vancouver (1973-1974), the Bob Berwick Memorial Centre outdoor play space at the University of British Columbia (1976), the Child and Maternal Health Unit of British Columbia, Vancouver (1975-1976), the play areas for Victoria General Hospital (1982), the Talmud Torah School Playground in Vancouver (1994-1995), the Burquest Synagogue and Community School in Port Coquitlam (1997), Elk's Family Hearing Resource in Surrey, (2000-2002), the Jim Everett Memorial Park in the UBC Endowment Lands (2000-2001), a garden for the children attending King David High School in Vancouver, (2004-2005), and in 2010, she helped the students of Prince of Wales Secondary School realize a garden on their grounds in Vancouver.

Of all of Oberlander's projects for children her playground for the Children's Creative Centre (1965-1967) at the Canadian Federal Pavilion for Expo 67, Montréal is her most cherished. As noted in Picturing Landscape Architecture - Projects of Cornelia Hahn Oberlander as seen by Etta Gerdes in 2006, "This playground was the catalyst for playground design across Canada. It incorporated art and self-motivated play" (107). Sitting with Oberlander in her Vancouver office on a rainy day in May of 2017, Oberlander remarked how this play space at Expo 67 showed that "all a child needs in a playground are hills and dales, sand and water, and a good play leader." She is known for contending that grading is a landscape architect's most powerfultool, and grading for hills and dales is very important when designing for children's play.

At Expo 67, Oberlander employed basic landscape elements to foster children's imagination, creativity and exploration. The outdoor play environment's size (38 meters by 18 meters) was to approximate the size of a typical tot lot so visitors could imagine how their own sites might be transformed. She designed this play space so that children were not directed what to do, rather using their own desires and instincts they responded to the landscape design itself. Oberlander's environment situated play features into the land with rolling terrain, looping paths, a wobble walk, and canal; and giant wood building pieces and a rocking boat. A beach-like expanse of sand and driftwood allowed children to balance, and dozens of plants provided play props. Large open areas were allocated for building with giant loose parts, lightweight Pan-Abode interlocking logs. Underneath the entrance bridge to the north was the interactive music area with four scrims and a 30-foot long op art wall designed in collaboration with sculptor Gordon Smith. Oberlander commented that we should bring back musical instruments to the play spaces we create for children.

Oberlander also noted that the Expo 67 play environment influenced landscape architects today, literally. The landscape architect, Virginia Burt, FCSLA, FASLA, MBCSLA fondly remembers playing in the outdoor play environment the Children's Creative Centre. According to Oberlander, as a child, Burt did not want to leave the play space and cried when she had to go back home.

Reflecting on the challenges that children face today, Oberlander contends, "We need to unplug play. I've seen children in prams playing with iPads. Whatever we do, let us have play spaces that allow for self-fulfillment in the age of computers. There is a movement afoot to give children private time without iPads or computers. Let us unplug play!" Oberlander also noted that children need to take risks and challenge themselves, but they also need "restful gardens with gentle mounds that spark an interest for the future, and that contrast with the concrete urban environment." These special places offer "seclusion, a release from every day pressure, and the possibilities of creating a make-believe world." SL



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