

Chapter 14

Nature and Place-Based Orientation: Well-Being for All— A Story of Dawson College’s Living Campus

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On a regular day of classes, a custodian wiped the full-length windows that looked onto a courtyard, now closed off to protect a nesting duck. He was smiling broadly. When asked, he pointed to the glass—indicating a cloud of tiny hand and nose prints where the local daycare children and those of employee children had eagerly pressed to get a clear view of a mother duck nesting with her 11 ducklings.

Through his smile, he explained how the view of the nesting ducks reminded him of his childhood home, a small village in the Philippines, where it was a common sight. The female duck found peace in this courtyard—a safe place with food, nesting material, and shelter. Daily buckets of pond scum, brought by employees rising to the challenge of supporting the ducklings through their early days, took care of the mother’s needs for feeding her growing family. Her comfort was ours too.

A manager pops by to have a quick peek at the ducks and shares that the topic of conversation at his supper table is all about reporting on the status of the precarious ducks, especially after several tragically died from eating cigarette butts. His children came the previous weekend to help clean the rooftop of butts, and the place where he worked magically transformed for them into one that cared for precious things, like ducklings.

In this chapter, we tell the story about Dawson College becoming a Living Campus and an advocate for Living Schools. We describe what motivated the transformation and what the initiative looked like as it achieved lift off. Though still mid-flight, we have learned valuable lessons and share them in the hopes that others interested in similar initiatives may benefit from the experience of Dawson College.



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C. O’Brien & P. Howard (Eds.). (2020). *Living schools: Transforming education* (pp. 169-182). Winnipeg, MB: ESWB Press. ISBN 978-0-9939534-2-2. Retrieval from www.ESWB-Press.org

Figure 1*Branding the Living Campus Concept*

Note: Arauz, J-D (photographer), Welcome to our Living Campus poster, 2014, copyright 2014 J-D Arauz, reprinted with permission.

Dawson College is located in downtown Montreal, with approximately 10,000 students and 1000 staff. Students tend to enroll in either a three-year technical program or in a two-year pre-university program. In Quebec, colleges are a part of the regular transition from high school (which ends at grade 11) to university education (typically 3 years for a bachelor degree) for all students who wish to attend university. The pre-university programs therefore represent the last year of high school and first year of university. As is typical with metropolitan commuter colleges, Dawson students leave their homes and community daily to attend their classes, where they are often moved from one class to another several times a day. A typical course load can be 7–8 classes per semester. Many take the subway to the College and enter the building with a direct underground entrance, returning home never to have been outdoors.

Students generally enter Dawson's programs at around 17 years of age and graduate to university or enter the workforce at 19–21 years of age. As is often the trend with this age group, the number of students registering with learning disabilities, such as ADHD, has spiked over the past decade. The current number of students registered to receive accommodations is 1200 (12%). Concurrently, the school nurse reports a sharp rise in mental health issues, such as anxiety and depression, amongst students. Furthermore, recent studies found that the

burnout rate for teachers in Quebec is 12–30% (Houlfort & Sauvé, 2010), with work-related stress on par with police officers and other first responders (Johnson et al., 2005).

Living Campus at Dawson College—Reconnecting People, Community & Nature

In the same courtyard as the nesting ducks, a teacher watches two girls high-five with excitement after installing hinges on a horizontally cut log taken from a felled 110-year-old oak tree on the property. This log will be given the dignity of decomposing in the area where it grew for so many years. It will be opened only at 1:00 p.m. each Friday as a part of a biodiversity study. Students and staff can't wait to see what creatures have inhabited the log every week. In fact, plans are underway to install a webcam so people can tune in to see the weekly discoveries.

The teacher charges into the courtyard area announcing, "I don't know what is going on out here, but I want to be part of it!" The Sustainability Coordinator explained that the habitat restoration project was part of a College Peace Centre initiative with a goal of bringing biodiversity back to the downtown core. The teacher decides on the spot to bring his entire class down, wanting them to see what was happening.

Students from many programs were involved in this project—a class of Indigenous students, nursing, civil engineering, leadership training, photography, and biology. In fact, the biology students identified over 104 species of insects and invertebrates in this courtyard in less than one year. As the teacher leaves, students finish planting milkweed plants to grow food for our monarch butterfly nursery project. The sound of a hammer and drill is heard as two young women repair an insect hotel.

This is our Living Campus, where we are explicitly using real-world challenges to reconnect people, community, and Nature.

Figure 2

Living Campus Biodiversity Spotlight

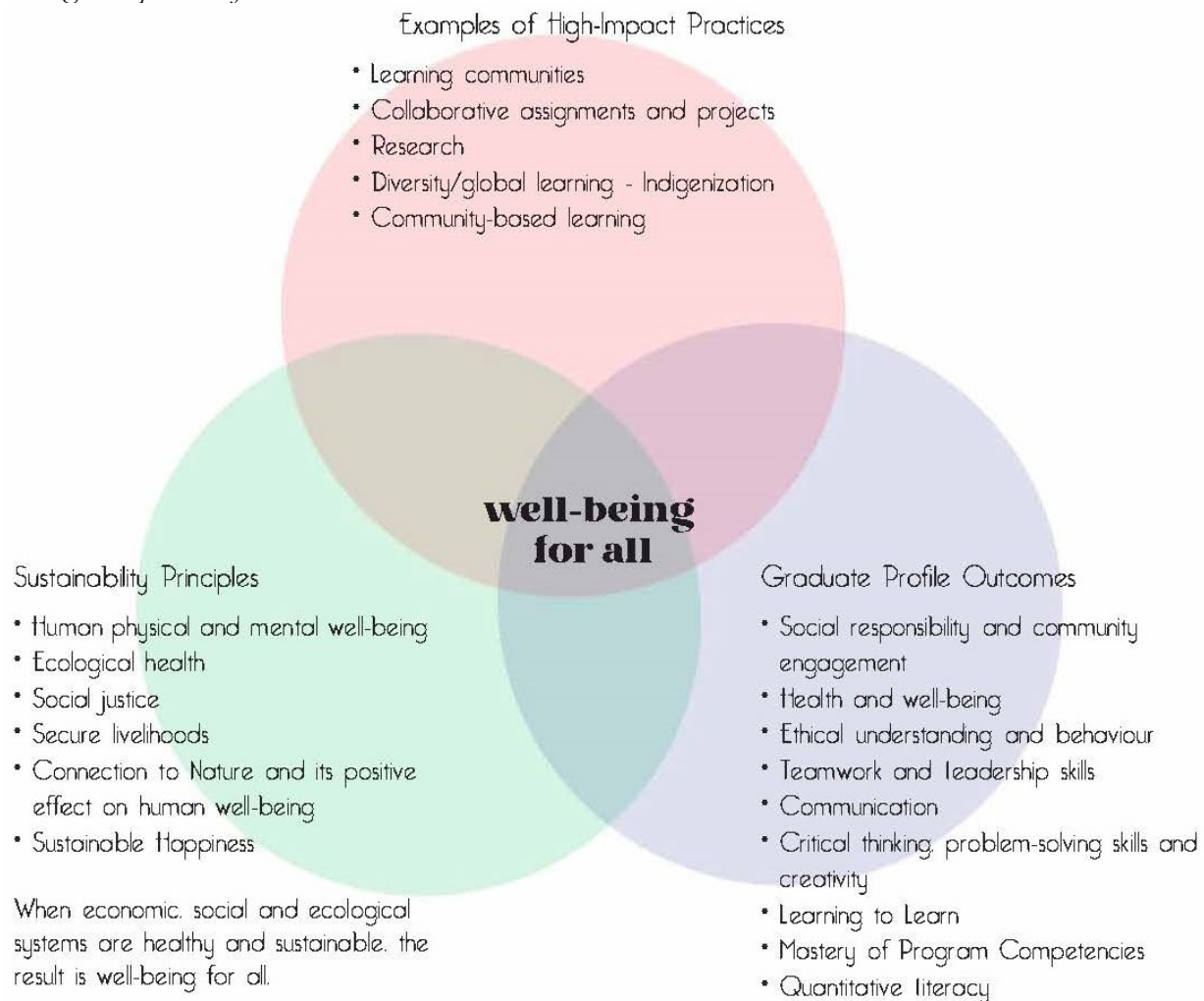


Note: R. Turner (Photographer); copyright Dawson College, reprinted with permission

We define our College as a Living Campus, which embodies our journey towards human and ecological well-being, and which includes human health and happiness, social justice, responsible economic activity, and a healthy natural environment for current and future generations. Defining ourselves as a Living Campus involves conceptualizing the College as a learning platform that breaks down traditional classroom structures and uses the entire campus as a learning laboratory.

Traditional social structures are also transcended. It is a call to our community of students, teachers, researchers, and staff to contribute to and participate in high-impact learning experiences to explore ways to bring about *well-being for all*, guided by sustainability principles and the objectives of Dawson's Graduate Profile Outcomes (see Figure 3).

Figure 3
Living Campus Platform



Note: This figure was developed by Dawson College Office of Academic Development, adapted from Dawson College's 2017–2018 Sustainability Report (Dawson College

Sustainability Office, 2018, p. 5). Reprinted with permission from the Office of Academic Development.

In both formal classes and in the extracurricular space, hundreds of student projects are developed each semester and contribute to a flourishing campus. A sample of these projects includes:

- Rooftop vegetable gardens and a weekly harvest market
- Designing and building a solar-powered radio station for a rural town in Mexico
- Rooftop beehives with a health challenge to win a sample of the honey produced
- A large Peace Garden with looping walking paths for relaxation (see Figure 4)
- Nature-based course pairings that explore interdisciplinary understanding of sustainability
- Monarch Nursery Project that breeds monarch butterflies, tags them and releases them in the Peace Garden
- Biodiversity zones on campus, including a small rooftop pond and insect hotels
- A Three Sisters Garden that honours local Indigenous ways of knowing sustainability
- An ongoing inventory of animals and insects on grounds and rooftops
- A campus-wide ban on plastic water bottles, with hallway water bottle refill stations strategically placed to increase socialization
- Sustainable Happiness Certificate programs, facilitator training, and peer-to-peer Sustainable Happiness workshops
- Zero-waste events and school-wide composting programs
- Repair Cafes (computers, small electric appliances, bicycles)
- Sustainability Tours, both live and virtual

Figure 3

Dawson College Peace Garden



Note: Dawson College stock photo, printed with permission.

These projects are talked about, shared with and emulated by other institutions. The Living Campus has become an incubator of ideas and is an ongoing inspiration for Living Schools. Furthermore, these projects have created a real sense of excitement and satisfaction in staff, teachers, and students alike. The Sustainability Coordinator involved with most of the Living Campus activities is often stopped in the hallways with comments like “I don’t want to leave,” “This has changed my teaching,” “I am proud,” “this is the most significant project I have been part of,” and “I want to be more involved in these activities every day.” People are genuinely happy and feel that they are contributing to *well-being for all*—themselves, others, and the planet. People forming this Living Campus community are giving their time and energy beyond what is called for. They are thriving and want more. The Living Campus has become an incubator of hope.

Why a Living Campus?

It would be inauthentic to say that our Living Campus initiative was born of facts, research, and evidence. It was and remains fundamentally grounded in values and a vision: that we hope for a better future than what is currently on our horizon, that our emerging generations will lead us to that future, and that educational institutions play a critical role in empowering those emerging generations to lead us. Students today are inarguably the most socially conscious generation ever known, and they are demanding action. A cornerstone of a Living Campus is providing a platform for real-world applications of the visions and values expressed above. Living Campus activities and projects create a sense of belonging to a community involved in positive change that becomes a wanted currency for our students. It is uplifting. “Living the learning” and intentionally working towards “*well-being for all, forever*” (Hopkins, 2013)—that is, the well-being of others, of Nature, and of themselves personally, for now and for the future—creates a powerful combination of creativity, meaning, accomplishment, and hope that drives change.

Many years of sustainability efforts—mostly housed within and occasionally spilling out of the capstone projects of a leadership training program—had resulted in a small, reliable core of staff, faculty, and students who were committed to a Living Campus. The challenge was to achieve institutional buy-in. For years, Chris (the first author) led these sustainability efforts at Dawson, often implicitly infused with messages of happiness and well-being. The core group were successful in making some changes, only to lose traction when attempting bigger changes that involved institutional commitment. In an especially democratic institution like Dawson College, even with the support of the Director General (similar to a college president), it became evident that more than just a committed few needed to be on board.

As anyone who attempts to influence a large institution to take a new direction knows, values are extremely important but they alone may not be sufficient. Indeed, while some people are immediately supportive and even ready and willing to roll up their sleeves and help, others hunker down and hold a steady course, resistant to the winds of trendy flashes of inspiration that can pull a place off-mission and waste precious resources in the process. Through hallway

conversations and other private dialogue, we learned that these “hunkerers” felt that either there was no real problem to be addressed and/or that Living Campus activities would not be productive in addressing a real problem. We recognized that it was time to introduce evidence into the conversation.

Enough credible information has emerged regarding the global scale of sustainability challenges. However, locally, these messages can get lost, so efforts to ground these global issues in local problems (e.g., institutional waste audits) and local successes (e.g., biodiversity zones around the campus parking lot, etc.) helped define the issues in a way that the Dawson community could recognize through their varied lived experiences.

As for human well-being, again, study after study reveals the deeply worrying rates of student mental health issues including depression, anxiety, and suicide. For example, a recent survey found almost half of college students felt “things were hopeless,” while a full half have experienced “overwhelming anxiety” in the previous year (American College Health Association, 2011). Among college-aged youth in Canada, suicide is the second leading cause of death (Statistics Canada, n.d.). Locally, we could point to institutional data and validation from our mental health professionals that Dawson was no exception to this general problem. Our students were suffering.

Although students are our primary concern, local studies had also confirmed major problems of stress and burnout among teachers (Froese-Germain, 2014; Houlfort & Sauv e, 2010; Johnson et al., 2005). Our faculty and staff were suffering as well. Given these external reports and internal validations, we could safely say that the problems Living Campus was designed to address were well articulated and validated.

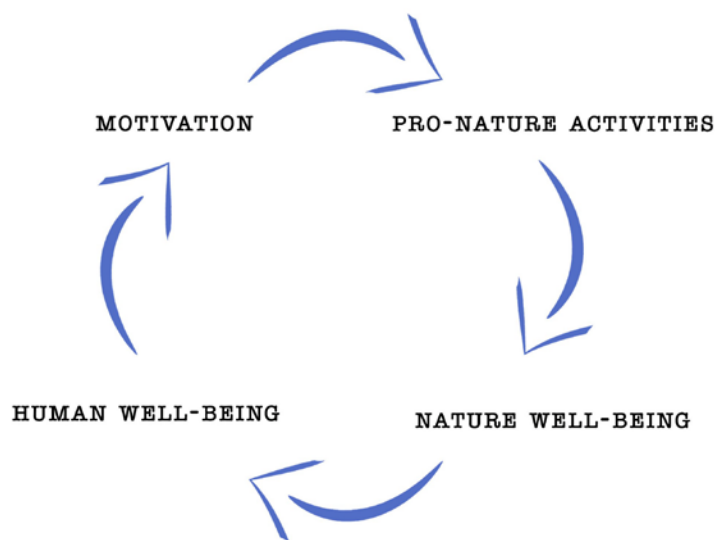
As to effectiveness of the Living Campus initiative, we knew of few examples from other institutions to draw upon, so we turned to more generalizable evidence from research literature. We found the sheer quantity of research linking various aspects of the Living Campus activities with its desired objectives was too plentiful to comprehensively summarize. Aided by research summaries (e.g., Wolf, Derrien, Kruger, & Penbrooke, 2020), we were able to document the positive effects of Nature on people. Systematic reviews found little if anything showing negative effects (Bowler et al., 2010; Tillmann et al., 2018). We used studies that spoke to us in terms of how they related to the Living Campus initiative and the types of activities we proposed. For example, Living Campuses invite Nature into our schools in various forms, and studies show that visual contact with Nature (plants and views of plants) has multiple benefits on stress levels, job satisfaction, attentional capacity, productivity, and more (Berto, 2005). We then found a genre of studies showing that facilitating a personal connection with Nature—a hoped-for downstream effect of introducing Nature into our learning environments—also had positive benefits (e.g., Martyn & Brymer, 2016).

Upon deeper reflection, we realized that we held an intuitive theory of change that included many levels of influence among the people involved in Living Campus activities and Nature itself. The theory is simple. It is based on the positive psychology understanding of how human and Natural well-being interrelate. We were simply connecting two dots: Nature makes people thrive, and people can make Nature thrive. Wherever we looked, the research evidence was supporting the validity of this theory.

We subsequently discovered a researcher, Corral-Verdugo (2012), who had developed and tested a more comprehensive theory that captured this interdependency. He showed that engaging in pro-Nature actions (i.e., Living Campus activities) is *motivated* by human well-being, including capacities, emotions, virtues, and strengths (Corral-Verdugo, 2012). Pro-Nature actions, in turn, result in Natural well-being (Corral-Verdugo et al., 2011). Natural well-being, in turn, results in human well-being (as seen from the previous studies surveyed).

Corral-Verdugo's model helped us understand and validate an embedded assumption about Living Campus: human well-being motivates more pro-Nature activities. This indicated a causal loop, a feed-forward cycle, that was inherent in the Living Campus theory. It reinforced a pattern that when trying to change institutional culture, it would be essential that Living Campus actions create more energy and motivation than they deplete. We have adapted Corral-Verdugo's linear model to create a circular one in which the effects of pro-Nature activities create the motivational and situational factors that contribute to more activities, and so on. Figure 5 depicts this regenerative cycle.

Figure 5
The Living Campus Theory of Change



Note. Adapted from Corral-Verdugo's (2012) linear model.

Given the research evidence and theoretical frameworks available, the value-based discourse around the Living Campus was now complemented by facts and evidence. We would love to report that marshalling all this evidence provided an instantaneous and comprehensive institutional buy-in. But the truth is that we added the evidence to our moral suasion, and resistance started to melt away—perhaps coincidentally—slowly receding until the path was clear enough to move in the directions described in the next section. Having deeply examined the vision, values, and evidence behind why we should launch a Living Campus initiative,

however, made our arguments for Living Campus stronger and sharper, more robust to even well-intentioned critique.

After nearly 15 years of sustainability advocacy at Dawson, with little traction, the right constellation of interest, people, and leadership fell into place around 2008. Through considerable foundational work and perseverance, a tipping point was reached in 2014. Administrators and dedicated teachers, both within the college and externally, identified the need for explicitly designed learning opportunities that use Nature-based learning to build community and strengthen the connection with Nature to help defuse stress and facilitate learning and literacies of all kinds.

During this period, the College also completed a round of strategic planning. Its mission, vision, and values incorporated sustainability and a core value of *well-being for all*. The resulting five-year strategic plan included, as one of its eight main goals, to “[be] a leading Canadian post-secondary institution in promoting and practising sustainability in all its endeavours” (Dawson College, 2020, p. 39).¹ Shortly after, the College created a sustainability mandate co-led by the Facilities department, the Office of Academic Development, and the Dawson Peace Centre. A full-time managerial position was created with staffing and an operational budget to oversee sustainability efforts growing throughout the community. A five-year sustainability plan was developed with over 80 performance indicators and benchmarks. Assessments and documentation validated our collective efforts and motivated us to do more. Sustainability was becoming contagious.

The Board of Governors unanimously voted for Dawson to be a carbon-neutral institution forever. Significant goals in waste and energy reduction were established. Biodiversity was invited back to our urban landscape with meadow, forest, decomposition and pond micro-habitats. Extensive gardens filled the rooftops, courtyards, and grounds, with over 20,000 flower blossoms during the summer months. Other numbers tell the story: 51 species of birds seen on campus, 1,900 students using the grounds for coursework in 2018, and 200 monarch butterflies released in 2017. The city of Montreal declared Dawson a monarch butterfly oasis for its restorative efforts.

The largest obstacle to institutional change is the institution itself—its legacies, traditional structures, and expectations, its habits of both thought and procedures. Yet, we need to humanize schools. Schools that efficiently shuffle students from class to class and treat them like buckets to be filled *en masse* with information, that transmit and assess information and skills disconnected from real-world situations, have failed us. We need places of education where students and staff feel hope for a better future and a sense of pride in accomplishments that positively change their community. We need to ask questions like, what do our institutions do within all their sectors of operation to demonstrate social justice and ensure ecological integrity?

¹ *Dawson College Strategic Plan, 2016–2021* has been revised several times since its initial publication (originally published October 26, 2016; revised version published November 26, 2018; latest version published February 25, 2020), though this strategic goal has remained consistent.

Teaching is simply not enough. Living the learning, with bold goals of action towards *well-being for all*, is the authenticity that perhaps defines transformative education. Dawson strives to become a place that can provide fulfilling experiences that generate friendships and collaborative efforts, and that make the world a better place. We are a flourishing school, a first-choice in Quebec, at least in part due to the vibrant student-life activities and engaging opportunities for learning. Living Campus has helped provide direction and builds communities bound by mutual interests and support. The campus abounds with formal and informal educational experiences with objectives that contribute to *well-being for all*.

(Unexpected) Outcomes

At the outset, we fully expected Living Campus's Nature-based activities to increase personal well-being. We had not expected, however, the personal transformations we witnessed, most often in staff. For example, while witnessing the delivery of six monarch caterpillars in an enclosure with plants, a manager who was originally opposed to Living Campus ideology once questioned, "Why are you bringing these bugs in here?" Just weeks later, however, he called the Sustainability Coordinator for advice because one of the caterpillars "looked skinny" and he was concerned! After a discussion about how important the caterpillars and emerging butterflies were to staff in creating opportunities for sharing positive emotions, he came to a one-hour workshop on Living Campus and said, "I get it now."

In another example, every single employee from the financial services unit walked outside together to release their butterfly because they all wanted to experience the event. The director of a nearby unit happened to see the group walking elatedly down the hallway and mentioned how he really didn't have much time for sustainability, but he wanted that good feeling amongst his staff. Engaging in Living Campus activities has resulted in numerous palpable personal and collective transformations.

An impact that we hadn't expected, however, was the social healing effects we occasionally observed. As is common in institutions with long histories and stable employment, Dawson is no exception to having its share of long-running interpersonal conflicts. Not only are these conflicts detrimental to personal well-being, but they can also create toxic work environments that lead to collateral suffering. Worst of all, these kinds of conflicts are often extremely resistant to conventional interventions. A most unexpected impact was witnessing known mutual antagonists, while engaging in Living Campus activities, sharing unprecedented one-on-one moments of civility with each other. It was common to see noticeable changes in attitude when empathy for other living things was introduced into high-stress administrative units.

The benefits of social activity on emotional and physical well-being are well established (House et al., 1988; Umberson & Montez, 2010). But social interaction itself doesn't adequately explain what we have witnessed. It has been our experience that there is something special about Nature-based activities that creates a productive space for social healing effects. Given

the general benefits to working environments, perhaps this is an area that deserves more attention.

Nature is healing, and the Living Campus initiative has been able to tap into these restorative effects through its community-based approach to using Nature and Nature-based activities as a focal point for improving personal and collective well-being. Though anecdotal, the evidence is voluminous, tangible, and consistent that the entire campus community is benefitting from its various pro-Nature activities. In 2018, just short of 2,000 students and their teachers used the grounds and rooftops to teach in an outdoor setting, while countless more visited their favourite spots for leisure purposes.

The biodiversity of the metropolitan campus has dramatically improved, both inside and outside the buildings. Birds are nesting on rooftops, insects have enough habitat for full life-cycles and bees are pollinating the vegetables grown in Dawson-created compost for our market. It would be too simple to focus on one of hundreds of initiatives and say this is a Living Campus, but we are confident that our holistic view and collection of initiatives that are a catalyst to relationship-building and pro-Nature activities provides ample evidence that our campus is on a path where life flourishes. The empathy shown to a skinny caterpillar or in listening to a cleaning staff's fond memories while watching ducks on a rooftop speaks directly to a sense of humanity and humility that spills over from individual to individual, and enough people shift the collective character of the institution. This ability of life to flourish at Dawson, including but not exclusive to humans, is the ultimate evaluation of our institution and speaks directly to what a Living Campus is: *well-being for all*, sustainably.

Living Campus and Living Schools

Our experience with Living Campus projects, and indeed the development of Living Campus itself, reflects many of the Living Schools attributes and practices (Howard & O'Brien, 2018). If we consider the Values and Vision column of the Living Schools Attributes and Practices Framework, some attributes and practices that stand out are: engaging with the world; promoting the health and well-being of students, staff, the wider community, and the natural environment; and bringing a solution-focused growth mindset. We could continue to identify similar corresponding attributes and practices in every column, but our focus in this chapter is on Nature and Place-based Orientation. Nature has been our inspiration, our mentor, and a source of healing for ourselves and our community. Our aim is to use the entire campus envelope to realize our theme of "connecting people and communities with Nature." Our focus on developing and conserving biodiversity zones is ideal for outdoor learning and enables students to visit diverse microhabitats for class "excursions" that don't require bussing. We have witnessed our own transformations, which are still works in progress, through Nature and place-based learning. Through Living Campus, sustainability isn't a stale word or subject to be studied but an exciting opportunity to experience hope and be part of positive change.

In the preceding chapters of this Volume, the educators we have heard from tell a similar story. The title of Chapter 5 (this Volume) indicates that the principal of Sigurbjorg Stefansson

Early School (SSES) recognizes the importance of Nature and place-based learning with the phrase “learning naturally.” We read that the SSES children were undaunted with the prospect of an outdoor adventure on a rainy day and it’s clear that these adventures were an integral part of their program.

Although we had been striving to reconnect our students to nature and increasing our visits to local natural habitats, including our beautiful beach, harbour, forested area, and neighbouring high school wetland project, there was something magical about this particular walk. Our outdoor excursions to these habitats, especially our forest adventures, had become regular occurrences with our Kindergarten to Grade 4 students and teachers concurred that these were powerful teaching and learning experiences. They also reflected that their students with more complex needs were not only very engaged in learning but were also more successful in self-regulating their emotions and negative behaviours. Teachers observed a deep level of engagement and focus exhibited by the students, so much so, that they felt that they were able to far exceed their initial expectations for reaching their targeted curricular outcomes. (Chapter 5, this Volume, pp. 67-68)

The greenhouse and butterfly garden at the Whycocomagh Education Centre that Jardine and Marshall-Johnson shared in Chapter 6 (this Volume) provide another view of how we can embrace Nature and place-based learning in our schools. Edible education, discussed in Chapter 9 (this Volume), represents place-based education that connects students with Nature while also having the potential to meet *all* of the Living Schools attributes and practices. Featherston Drive Public School (Chapter 8, this Volume) offers other options for us to learn from—garden boxes, indoor vertical gardens, and the butterfly garden that was planted in the memory of a former principal. They teach us something else as well about what it means to integrate the vision of *well-being for all*. Their exploration of Living Schools brought them to the realization that it is an “ecosystem of relationships” that is at the very heart of their school. This phrase unites all of the attributes and practices of Living Schools and captures what we have learned through Living Campus and are continuing to develop. It reminds us, too, that collaboration amongst Living Campuses and Living Schools could both broaden and deepen an exceptionally powerful ecosystem of relationships.

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