LIVING SCHOOLS:
Transforming Education

Catherine O'Brien and Patrick Howard
Editors

ESWB Press

LIVING SCHOOLS: TRANSFORMING EDUCATION

Edited by

CATHERINE O'BRIEN
PATRICK HOWARD

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To all the young people from coastal communities who, over many years, taught me about the special connection to place that when tended and strengthened enlivens and animates all that we do and become.
Patrick Howard

To all the people, plants, and animals that have mentored my understanding of well-being for all. And to my children, Sean and Alexander, who are a delightful source of inspiration!
Catherine O'Brien

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Our work on Living Schools emerged during our tenure in the Education Department of Cape Breton University, which recognizes that Cape Breton Island is in Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq People. This territory is covered by the "Treaties of Peace and Friendship", which Mi'kmaq and Maliseet people first signed with the British Crown in 1725. The treaties did not deal with surrender of lands and resources, recognized Mi'kmaq and Maliseet title, and established the rules for an ongoing relationship between nations.

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ABOUT THE AUTHORS

Editors

Patrick Howard, PhD

Patrick Howard developed his interest in the intersections between issues of sustainability and education during a twenty-year career teaching school in coastal communities on the island of Newfoundland, Canada. He taught children in a region once home to the greatest biomass on the planet. The incredible diversity and numbers of fish species that swam the plankton-rich waters of the North Atlantic stood not only as testament to the miracle of the life generating power of the Earth, but also to the unknowable depths of human capacity to destroy that same miraculous fecundity. He is Professor of Education at Cape Breton University and obtained his PhD in Secondary Education from the University of Alberta.

Patrick's research and writing have been dedicated to exploring how our defining human abilities, language and imagination, as products of nature, can be seen as mediums by which we may grow in our relationships with the living places we inhabit. A common theme of his work is the question of how teaching and learning can reflect deeply the human-nonhuman interrelationship to provide a vital, dynamic vision of education based on life values. This vision has been further developed in the concept of the Living School in collaboration with Dr. Catherine O'Brien. His research has been published widely in national and international journals. Patrick is a founding member of the Environmental and Sustainability Education in Teacher Education Standing Committee of the Canadian Network of Environmental Education and Communication (EECOM).

Catherine O'Brien, PhD

Dr. Catherine O'Brien has been actively engaged in sustainability efforts locally, nationally and internationally for more than 25 years. As a participant in the Global Forum of the 1992 Earth Summit, she served as a co-coordinator of the alternative Debt Treaty that was forged by non-governmental organizations from around the world. Her doctoral research at the Barefoot College in Rajasthan, India explored its pioneering work in education for sustainable community development.

Catherine is a Senior Scholar with the Education Department of Cape Breton University, Canada where she developed the world's first university course on sustainable happiness based on the pathbreaking concept of sustainable happiness she created – integrating sustainability principles with positive psychology with the aim of fostering *well-being for all*, sustainably. Catherine is also the co-creator of the burgeoning field of Living Schools.

In 2012, Catherine was invited to participate in the United Nations High Level Meeting in New York that explored the implementation of the UN Resolution on Happiness. Her book on *Education for sustainable happiness and well-being* is published through Routledge. Further information about publications can be found at: http://sustainablehappiness.world and

http://livingschools.world. Her Green Interview with Silver Donald Cameron may be viewed at https://thegreeninterview.com/interview/educating-for-sustainable-happiness/

Contributors

Chris Adam

Chris is the manager of sustainability at Dawson College in Montreal. He spearheaded their approach to creating a living campus, which was the inspiration for the development of living schools. He was also instrumental in the development of Dawson's strategic plan that endorses *well-being for all*.

Patrick Carney, PhD

At the time of this writing, Patrick Carney is the Co-Chair for the Ontario Coalition for Child and Youth Mental Health. He serves as the Mental Health Lead at the Simcoe Muskoka Catholic District School Board (Ontario). Pat obtained his doctorate degree in Educational Psychology at the University of Alberta. In 2012, he was the recipient of the Award of Merit from the Ontario Psychological Association for his "significant and sustained contribution to Educational Psychology." In 2014, he was elected to the status of "Fellow" with the Canadian Psychological Association. He is the author of *Well Aware: Developing Resilient, Active, and Flourishing Students*.

Robert Cassidy, PhD

Robert Cassidy is the director of the Centre for Teaching and Learning and Affiliate Assistant Professor of Education at Concordia University, Montreal. His work supports institutional development around teaching and learning, including decolonization and indigenization efforts. He was previously Assistant Dean of Academic Development at Dawson College, where he had the opportunity to assist Chris Adam's heroic efforts to raise institutional awareness of and building infrastructure to support the Living Campus initiative.

David Coyne

David Coyne is a teacher with the privilege of working with English as a Second Language students who have missed years of schooling owing to war and displacement. David is a man whose life was changed by fatherhood and left his career as a chef to become a teacher, which he sees as his activism, especially facilitating the environmental club at Featherston Drive Public School. His sign is Taurus, and he likes long walks on the beach and the colour yellow.

Rosanna Cuthbert

Rosanna Cuthbert is the Principal of Sigurbjorg Stefansson School, a Junior Kindergarten to Grade 4 school in Gimli, Manitoba. Rosanna is deeply passionate about Education for Sustainability and has strived diligently to embed these principles into a whole child approach to learning since becoming Principal of the school in 2010.

Rosanna was honored with the 2017-18 Manitoba's Excellence in Education award for Outstanding School Leader. Sigurbjorg Stefansson School was the recipient of the 2015 Manitoba Excellence in Education for Sustainability Award for Education and received provincial recognition as an Eco-Globe Transformational school in 2014. Rosanna was chair of the divisional Education for Sustainability committee for several years and has presented at many conferences/workshops and university courses to share her school's successes with infusing Education for Sustainability and holistic education.

Terry Gibbs, PhD, Garry Leech, Morgan Gibbs Leech and Owen Gibbs Leech

Terry and Garry teach international politics at Cape Breton University, Canada, and are authors of numerous books. Their sons, Morgan and Owen, are homeschooled. Both boys are fascinated by the natural world and have a passion for all animals, microscopic and large.

Betsy Jardine, PhD

Betsy's current research is on "Cultural Ways of Forming Ecological Identities and Factors Affecting Their Ontologies" as inspired by Mi'kmaw community of We'koqma'q, which has made a lasting impression on her views and sparked her interest in understanding cultural world views towards nature around the planet. Betsy believes one becomes attuned to the natural world through a developmental process in childhood. One's nature relationship remains a deep part of our personal identity throughout the lifetime impacting our behaviours. Betsy believes by becoming consciously aware of our links to the web of life, we experience a deep joy, understanding oneself as part of the web of life!

Brent Kay, PhD

Brent has over 20 years of experience as a superintendent of schools in both Canada and the United States. He was recognized as the 2017 Vermont Administrator of the Year by the Vermont Association of Educational Office Professionals and the 2015 Vermont Superintendent of the Year. Brent has over 20 years of experience in governance consulting for corporate and education boards and executive leadership teams. He has expertise in leadership and governance structures for transformative educational change. He believes scaling for change to facilitate transformative educational innovations like Living Schools requires strong relationships and partnerships between the community and school leaders to promote the framework and ethos necessary for the establishment and growth of these approaches.

Michelle Marshall-Johnson

Michelle is from Eskasoni First Nation. She is an educator and the daughter of internationally renowned Mi'kmaq Elders Albert and the late Murdina Marshall, the originators of the concept of *Two-Eyed Seeing*. Throughout her life, Michelle, a fluent Mi'kmaw speaker, has learned Mi'kmaw cultural ways of knowing from her parents and bears the responsibility of being a Knowledge Keeper.

Sean O'Brien Murray

Sean graduated with a Master's degree in Communication and Culture from Ryerson University, Toronto in 2018. Her research focused on edible campuses. In recent years she has been working in collaboration with Dr. Catherine O'Brien, publishing and developing education resources related to Sustainable Happiness, Living Schools and Living Campuses.

Tanya O'Brien

Tanya is a Learning Resource Teacher at Featherston Drive Public School in Ottawa. She began as a student teacher at Featherston, bought a house in the neighbourhood and never left as the school feels like an extension of her home and family. She believes that she has the best teaching assignment in the school as it allows her to make connections and forge relationships with students and staff.

John Stewart

John is a former director of the Green School, Bali. He is currently developing a Living School in Australia. On returning to Australia from Bali, where he was the Head of School of Green School, John wanted to address the neediest end of the educational spectrum – and so took on teaching duties in the Ngulingah Aboriginal education program, operating out of Southern Cross Distance Education. John is currently developing new educational offerings on the Northern Rivers – emphasizing the importance of living. This includes Living Kinder, Living School, and Living Learning. In 2013, he was awarded a National Excellence in Teaching Award for Leadership – one of only twelve nationally (Australia), and one of only two in New South Wales. In 2014, he was awarded a Goody Award for Social Good – one of only six awarded per annum.

Introduction

Living Schools and Well-Being for All

CATHERINE O'BRIEN & PATRICK HOWARD

If you have ever walked into a school and had the sense that you are in a place where students and staff are happy to be there—they are engaged and fully present, plants are growing, student work is celebrated, it is also aesthetically pleasing—then it is very likely you have already encountered a glimpse of a Living School. These are places where people are flourishing, where staff and students are on a co-learning journey, and there is explicit awareness that schools are interconnected with local and global communities, including the natural world. We have chosen to refer to these "pockets of excellence" as Living Schools because they reflect an ethos of bringing life to education and education to life. This means that the values of sustainability and *well-being for all* (Hopkins, 2013; O'Brien, 2016) influence *what* is learned, *how* it is learned, *where* and *when* it is learned, and ultimately *why* it is learned. Living Schools demonstrate the inspiring and dynamic transformation that is possible when the very purpose of education is questioned and the answer is that it ought to lead to *well-being for all, sustainably*. This is both a radical reformulation of education as well as one that draws on longstanding views that education must be experiential (Dewey, 1997, p. 39), that respects holistic world views at the heart of many Indigenous cultures (Deer & Falkenberg, 2016), and that recognizes "new" pedagogies also include wisdom traditions associated with mindfulness and land-based learning. Living Schools bring a coherent perspective to the diverse and sometimes divisive efforts to reimagine education. These schools take us beyond a collection of social justice or environmental projects, which are superb in their own right, but are not propelling a timely transformation of education.

For decades, educators have been grappling with the challenge of determining how to transition outdated school systems that were developed for an industrial age into places where learning meets more contemporary needs. Recommendations for transforming education include developing 21st century competencies (C21, n.d.; Battelle for Kids, n.d.), integrated use of technology, increasing creativity, innovation, and entrepreneurship (Robinson & Aronica, 2015; Wagner, 2012; Zhao, 2012) through the use of new pedagogies (Fullan & Langworthy, 2014). Economic prosperity and community development figure strongly as a rationale for these recommendations, though individual well-being is also an anticipated outcome (Kelly, 2016; Kelley & Kelley, 2013; Robinson, 2011; Wagner, 2012; Zhao, 2012).

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C. O'Brien & P. Howard (Eds.). (2020). *Living schools: Transforming education* (pp. 1-9). Winnipeg, MB: ESWB Press. ISBN 978-0-9939534-2-2. Retrievable from www.ESWB-Press.org

Consequently, global efforts are underway to re-conceptualize K–12 education for what is commonly known as 21st century teaching and learning. In Canada, the vision for 21st century teaching and learning has been conceptualized around the "7 C's: Creativity, innovation and entrepreneurship; Critical thinking; Collaboration; Communication; Character; Culture and ethical citizenship; Computer and digital technology" (Kershaw, 2012). The national and international shift to 21st century learning is due, in large part, to well-organized, well-funded education initiatives launched by non-governmental and not-for-profit organizations. Many of these initiatives were formed with the mandate to shift education priorities in new directions and disrupt education practices initiated over a hundred years ago that undergird current education practice (Ananiandou & Claro, 2009; Battelle for Kids, n.d.; Brooks & Holmes, 2014; C21, n.d.; Centre for Educational Research and Innovation, n.d; Fullan & Langworthy, 2013, 2014).

To support the "radical" (Fullan & Langworthy, 2014, p. 4) makeover of education for the perceived challenges and demands of the 21st century, educators have turned to real-world design projects that require creative, critical problem solving, collaboration, communication, and integration of content knowledge, new learning, and skill development. Large multi-national tech companies and Silicon Valley billionaires have taken special interest in American K–12 education and are investing large sums of money to re-shape the classroom for 21st century learning goals (Singer, 2017a, 2017b). It can be argued that each of these new initiatives and approaches are firmly rooted in progressive education that dates from the late 19th century. The focus on experiential learning, individualized instruction, deep learning, and cooperative learning with real-world application that have direct relevance to students' lives were common to Dewey, Montessori, Malaguzzi, and Fröbel, among others.

While 21st century education initiatives are focused on experiential learning and on the skills, competencies, dispositions, and work habits to prepare students for the future, in almost all cases the associated documents avoid an explicit discussion of the fundamental purposes and aims of education. Rather, in the discourse of 21st century skills development, the purpose, or aim of education, is *implicit*. Education is designed to meet functional ends—to develop creative, innovative, life-long learners, to solve the world's problems, to answer the challenges of shifting workforce demands, and to develop good citizens. Zhao (2012) sees the dominant education paradigm steeped in preparation for conventional employment.

> This paradigm aims to prepare individuals to find gainful employment in the current economy and to fit into the existing society. It was designed to produce workers for the mass-production economy that came with the Industrial Revolution. (p. 146)

It is a paradigm that is out of step with the time-sensitive environmental challenges that we face as a global community. It is also ill-suited to the imperative of establishing economies that contribute to sustainable livelihoods and lifestyles. As Zhao (2012) notes, "In 2011, nearly 75 million youth aged 15–24 were unemployed worldwide" (p. 1). Clearly, churning out more high school graduates who are job-ready for an old economy is short-sighted and a disastrous waste of their formative years, not to mention education resources. The broad hope that the

remedy for this is to develop more innovative thinkers and entrepreneurs has opened space for less conventional styles of teaching and learning.

A hallmark of these "new pedagogies" is student experience and agency. The teacher's role shifts to guide, mentor, co-learner, and learning partner. As exemplified by the increase in popularity of various new pedagogies—the creation of maker spaces (Kelly, 2016), a do-it-yourself (DIY) ethos (Knobel & Lankshear, 2010), and robotic competitions, hack-a-thons, problem- and project-based learning (Buck Institute of Education, n.d.)—the enhancement of sophisticated information and communication technologies in education provides an identifiable process for the application of interdisciplinary, experiential learning, and creative processes. Unquestionably, new pedagogies are "grounded in purposeful learning by doing" (Fullan & Langworthy, 2013, p. 4). However, the ultimate vision, aim, or purpose of that purposeful learning is rarely fully articulated.

Few of these recent endeavours to transform K–12 education have incorporated the concept of sustainability and instead essentially aim to ensure that students are prepared for success in a fast-changing world—presumably contributing to the outdated and unsustainable economic activity that prevails, a pattern that relies on the over consumption of non-renewable resources and environmental degradation. (The term sustainability in this book refers to the view that we must live equitably within the resource capacity of our planet and with respect for the "other than human" inhabitants). It could be argued that even the apparently most forward-thinking visions will not adequately meet the needs of citizens in an era where climate change adaptation and heightened threats to food and water security are the rapidly emerging reality of our times (International Panel on Climate Change [IPCC], 2018) unless sustainability is fully integrated through a repurposing of education (Hopkins, 2013). In contrast, *Living Schools: Transforming Education* demonstrates why and how we can integrate the best practices of innovative education leaders with the aim of developing sustainable societies where people and ecosystems flourish.

Living Schools

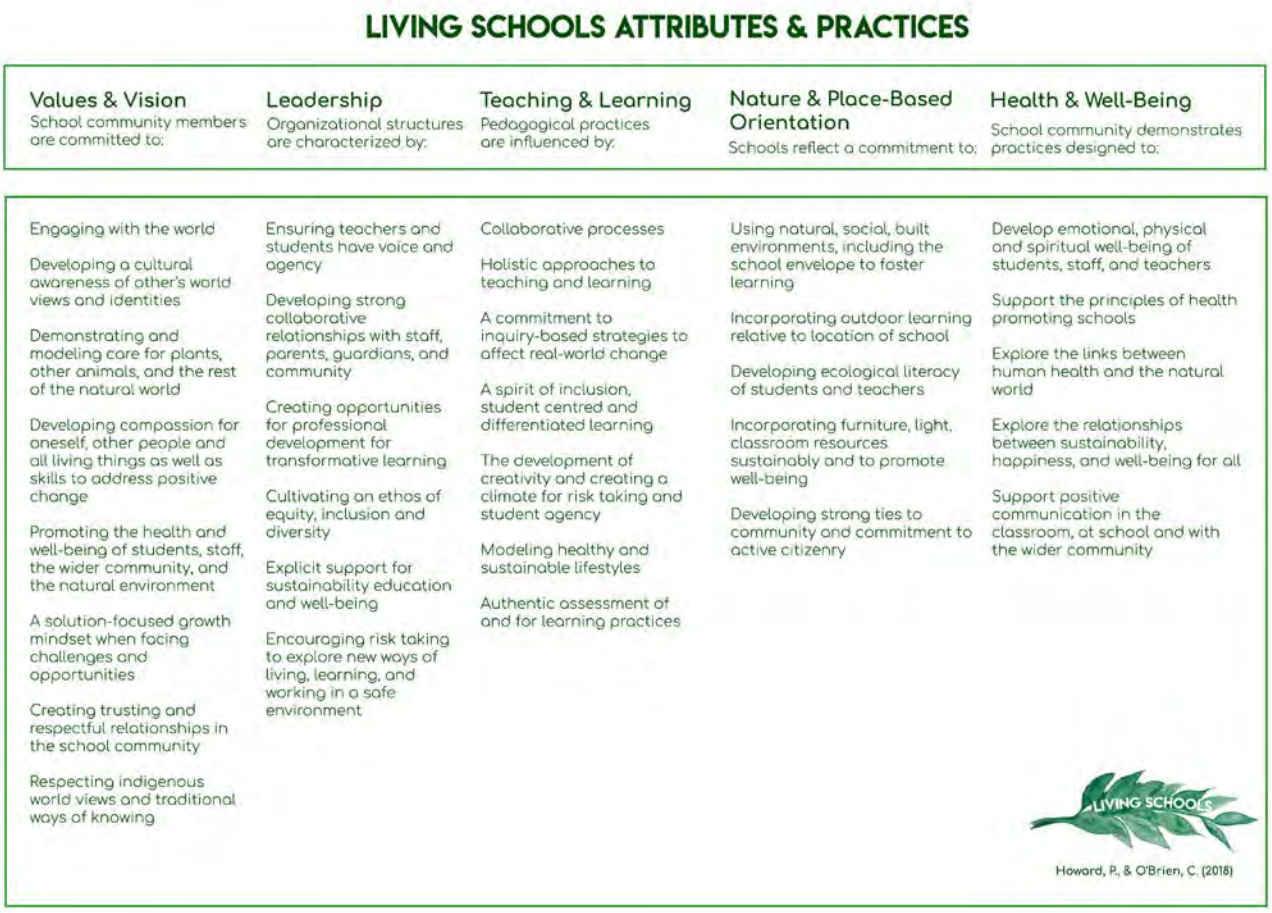
Living Schools are predicated on an education vision of *well-being for all*.

> This embraces well-being—individually and collectively, for all people and the "other than human" life on our planet. It is an inclusive vision that recognizes that our well-being is important, both now and in the future, and that our well-being is intertwined with that of other people and the natural environment. (O'Brien, 2016, p. 9)

A similar perspective is embedded in O'Brien's work on sustainable happiness that is defined as happiness that contributes to individual, community, or global well-being without exploiting other people, the environment, or future generations (O'Brien, 2010). The focus on well-being ensures that Living Schools support outdoor learning, social-emotional learning

(Collaborative for Academic, Social, and Emotional Learning, 2012), positive education, and Health Promoting Schools where staff and students flourish (Joint Consortium for School Health, 2008). In previous work (Howard & O'Brien, 2017; O'Brien & Howard, 2016) we have outlined the rationale for Living Schools and examples of the Attributes and Practices that can be found in Living Schools (see Figure 1).

Figure 1
Living Schools Attributes and Practices Framework (Howard & O'Brien, 2018)



In our experience, educators who are learning about Living Schools through graduate studies at Cape Breton University view the concept as a refreshing approach to learning. Pascal Carrara, a high school teacher in British Columbia, Canada describes it like this:

> I find the word itself, "Living" very appealing. It puts learning for students into a visible and real form beyond what is only the theoretical. It feels true to learn through something that is alive. It feels as if we are part of something. Something

> real. I close my eyes and picture vertical gardens, and perhaps micro habitats around the school. I see interconnections that bring local insects, plants, and animals, that brings with it a natural flow of information. I don't picture a quiet space. … I picture movement and flow, a flourishing place that I want to be. We all feel more inspired to be there. (Carrara, 2017)

Grade one teacher Angela Neufeld makes the connection between Living Schools, creativity, innovation, well-being, and sustainable happiness.

> I think that Living Schools support healthy relationships because a Living School lends itself to more partnerships instead of power-based relationships. With more collaboration, skills in problem solving and coping grow as they are needed more frequently. Since Living Schools encourage creativity, innovation and sustainable happiness, staff and students are given opportunities to flourish. No longer trapped within restrictive expectations, everyone in the building can experience joy, engagement and meaning as they follow their interests and find deeper meaning in their learning. (Neufeld, 2017)

Ryan Smithson, a high school physical education teacher, provides the perspective that Living Schools create an overarching theme and purpose.

> When taking part in Sustainability initiatives around the school, I sometimes ask myself "what is the endgame?" Although the staff and students at our school have taken part in several sustainability initiatives such as gardens, naturalization zones, bike repair clubs, composting programs, etc… I still can't help but feel as though they are all just somewhat random initiatives working independently of one another. That is not to say that it is a bad thing, but I feel that [Living Schools has] helped me realize a potential goal, "endgame" if you will, of unifying our sustainability initiatives and organizing them all under the same umbrella. (Smithson, 2017)

Living Schools: Transforming Education will take you on a learning journey that will inspire you, personally and professionally. The book is designed in three parts. Part I offers a conceptualizing of Living Schools, Part II provides examples of Living Schools, and in Part III the authors discuss the schools that were profiled in Part II through the lens of the main sections in the Living Schools Attributes and Practices framework. Some additional examples are also introduced in this final section, and we conclude the book with insights and thoughts about next steps.

In Chapter 2, Patrick Howard makes the case for why Living Schools are at the forefront of education discourse, situating this work within the literature on transforming education, such as progressive education, Education for Sustainable Development (ESD), and 21st century teaching and learning. Chapter 3, by Catherine O'Brien and Patrick Howard, reviews each of the attributes and practices in Figure 1 to outline their relevance for contributing to the education vision of *well-being for all* that can be realized through Living Schools.

For Part II, we sought out educators who have first-hand experience with schools that represent many or all of the Living School attributes and practices. John Stewart, former director at Green School Bali, tells us in Chapter 4 about the Living School plans underway in Australia. Rosanna Cuthbert, the principal at Sigurbjorg Stefansson Early Years School (Manitoba, Canada) writes in Chapter 5 about the seven-year transition that she and her staff undertook to incorporate the Reggio Emilia student-centred approach to learning with education for sustainable development. Betsy Jardine engages in a dialogue with Mi'kmaw educator Michelle Marshall-Johnson in Chapter 6. Their conversation illustrates how education that reflects a living culture enriched with Mi'kmaw traditions and worldviews aligns with Living Schools. In Chapter 7, we benefit from the experience of Brent Kay, who oversaw groundbreaking innovations as the superintendent of his school district in Vermont (United States)—innovations that he now views as corresponding with Living Schools. Chapter 8 has been written by two teachers from Featherston Drive Public School (Ottawa, Canada), Tanya O'Brien and David Coyne, who share their experience in a school that has more than 50 cultures represented and they explain how that diversity is celebrated by engaging children in growing, preparing, and sharing familiar food and dishes traditional to their homelands—and much more! Sean Murray connects edible education with Living Schools and place-based learning in Chapter 9. Part II concludes with Chapter 10 written by a family (Terry Gibbs, Morgan Gibbs Leech, Owen Gibbs Leech, and Garry Leech) whose approach to homeschooling aligns with a Living School ethos.

Throughout Part III, building on the success stories of the school portraits and narratives in Part II, authors consider how these portraits fit within the list of Living Schools Attributes and Practices framework with chapters focusing on Values and Vision (Chapter 11 by Catherine O'Brien and Patrick Howard), Leadership (Chapter 12 by Brent Kay), Teaching and Learning (Chapter 13 by Patrick Howard), Nature and Place-based Learning (Chapter 14 by Chris Adam and Robert Cassidy), and Health and Well-Being (Chapter 15 by Patrick Carney and Catherine O'Brien). Chapter 14 straddles Part II and Part III because it begins with the story of the Living Campus at Dawson College in Montreal. Dawson's Living Campus was our initial inspiration to develop the Living Schools framework and has continued to be a champion for this work, hosting the first Living Schools Symposium in 2018. Subsequently, Dawson collaborated with Concordia University to sponsor the 2019 Living Schools symposium. This is a superb example of how post-secondary institutions can mentor *well-being for all*.

Our final chapter (by Catherine O'Brien and Patrick Howard) focuses on additional insights and next steps. It includes answers to some of the questions that may arise for you as you consider how to move forward with your own Living School or Living Classroom. As elementary teacher, Julie Van Caeyzeele, noted after her first introduction to Living Schools, it was inspiring and daunting to try to determine where she could start in her own teaching practice. She was convinced that Living Schools represent the direction she wanted to take as an educator but the prospect of trying to work at a whole school level was intimidating. Her solution was to discover how she could establish a Living Classroom. We have also invited some of our contributors to provide further insights regarding the impact that Living Schools

have for them personally or professionally, as well as advice they have for other educators. The Appendices provide some resources to support you and your colleagues to embark on an exploration of Living Schools that you can customize for your context.

By the time you have concluded this book, you will have a clearer picture of what is possible for your school, some ideas for transitioning towards becoming a Living School, a better sense of the challenges that may need to be addressed, and undoubtedly, the realization that Living Schools represent the future direction for schooling and for sustainable communities. *Living Schools: Transforming Education* has been written with educators in mind. We have found that as educators are introduced to Living Schools they very quickly recognize that the holistic framework weaves together many themes that are often introduced as discrete topics. They also note that the vision of Living Schools offers a cohesive response to the many challenges that teachers face in complex classrooms. Rather than offering a single solution to a singular challenge, Living Schools can effectively work proactively to prevent or resolve school-based challenges. In addition to classroom teachers and administrators, we believe that this book is ideally suited for instructors of pre-service and in-service education as well as academic researchers who are interested in transforming education. When parents learn about Living Schools, they also respond with enthusiasm saying, "This is the kind of school I wish my child could attend!" We believe that *Living Schools: Transforming Education* will also interest parents and students.

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PART I

CONCEPTUALIZING LIVING SCHOOLS

Chapter 2

Living Schools and 21st Century Education: Connecting What and How with Why

PATRICK HOWARD

The purpose of this chapter is to situate the concept of a Living School in the larger educational discourse. It is useful to contextualize the idea of coalescing schooling around the concepts of *life* and *living*. In this way we can trace the notion of a Living School to its roots and understand it as a *radical* idea that has been cross-pollinated by rich and deep traditions of progressive education going back over a century. As we will see, creating a Living School *is* radical in that it is profound, far-reaching, and fundamental, but it is also radical for another reason. In this chapter, I will demonstrate that the vision for Living Schools is closely related to a transformative vision for education as represented by recent initiatives characterized as 21st century teaching and learning. However, in a Living School, the curriculum, the approaches to instruction, the physical environment, and the relationships between and among students, teachers, parents, and the community are guided by an ethos that is life-affirming. It reflects a way of being and becoming that roots education in what the philosopher John McMurtry (1998) calls a "life-code of value" and situates the school in a living community of relations.

Living Schools re-conceptualize education for our times. Such schools do not retreat from explicitly articulating a response to the question, "What is education for?" Historically, educational approaches, trends, and initiatives, including 21st century teaching and learning, have largely avoided explicitly engaging with the *why* of education. Commonly stated purposes of education most often align with raising test scores, helping students achieve by becoming better learners, and preparing students for emerging labour markets. These aims of schooling often deflect from deeper questions of the larger purposes of education. Without doubt larger purposes can be teased out of discussions of 21st century teaching and learning. The result of this effort invariably discovers that the *why* of education reflects a set of functional outcomes identified with an economic value system that in many ways commodifies the lives of students and "shapes the selves of learners in accordance with what are perceived to be current economic imperatives, rather than, say with what arises out of their sense of their own existence" (Bonnett, 2009, p. 358).

(see http://creativecommons.org/licenses/)

C. O'Brien & P. Howard (Eds.). (2020). *Living schools: Transforming education* (pp. 13-23). Winnipeg, MB: ESWB Press. ISBN 978-0-9939534-2-2. Retrievable from www.ESWB-Press.org

Before we explore these ideas more fully, let us turn around and look down through time to discover the roots of the Living School concept grounded in the traditions of progressive education. We will then look at Education for Sustainable Development and 21st century teaching and learning as important influences on the Living School concept. Finally, we will examine what sets Living Schools apart from previous approaches by exploring how life values and sustainable well-being represent a profound and radical shift toward the kind of education required for our times.

Progressive Education

Progressive ideas can be traced to the earliest writings about education. In the Western tradition, and particularly in the United States, pragmatist philosophers Charles Sanders Pierce, William James, and most notably John Dewey influenced progressive educators. Dewey (1938/1997) showed that complexity and change meant that education could not be reduced to formulaic preparation for life; it needed to be *life* itself, messiness and unpredictability included. Progressive educators looked for ways to realize Dewey's vision through valuing diversity, building on the interests of students, organizing learning in larger more holistic units, connecting school to the surrounding community, and developing citizenship.

The central tenets of progressive education were formalized in 1919 at an organizational meeting of the newly created Progressive Education Association (PEA) in Washington, DC (Little, 2013). The founding principles were based on Dewey's writing and research. Dewey ran an experimental school on the campus of the University of Chicago in the 1890s and into the turn of the 20th century. For Dewey, education connected to the vitality of life and living was the "great thing" (Dewey, 1899, as cited in Waks, 2013, p. 79). Dewey wrote,

> We cannot overlook the importance for educational purposes the close and intimate acquaintance got with nature first hand with real things and materials, with the actual processes and their manipulation… no number of object lessons can afford even a shadow of a substitute for acquaintance with plants and animals of the farm and garden acquired through actual living among them and caring for them. (Dewey, 1899, as cited in Waks, 2013, p. 79)

The reality of life in nature as *the great thing* is an enduring theme throughout Dewey's writings. Progressive schools were community-based and connected to the life of the neighbourhoods in which they were located. They promoted child-centred learning in which the unique self of the student was nurtured to meet their full potential. As we will see, the shadow of progressive education looms large in more recent initiatives, such as Education for Sustainable Development (McKeown, 2002; United Nations Education Science Culture Organization, 2019). In *The School and Society* (1900/2009) Dewey included diagrams and designs based on his work at the Laboratory School in Chicago. The neighbourhood, gardens and fields, businesses, and the university surrounded the school and connected the students to

the life of the *real world*. Teaching and learning areas replaced traditional classrooms and the natural environment was connected to these learning areas. Gardens and fields supplied fresh food for the kitchen, another important learning area associated with learning for the occupations. More recent educational approaches, like the emergence of project-based learning (PBL; Buck Institute of Education, n.d.), are also artefacts of progressive education re-purposed for today. The roots of PBL are found in the *The Project Method* written in 1918 by William Heard Kilpatrick. John Dewey, a fellow faculty member at Columbia Teachers College at the time, introduced Kilpatrick to the method.

Innovative, progressive schools flourished in the U.S., Canada, and elsewhere until the 1950s then they waned and virtually disappeared. There was a resurgence in the 1960s and 1970s with the Open School concept, and indeed some progressive schools continued and are highly successful to this day. The University of Chicago Laboratory Schools are considered by some to be among the best schools in the United States (Knoll, 2014), while others argue they have simply joined the competitive prep school world (Montag, 1991). However, a conservative turn in the 1950s, rising concern of losing economic ground during the Cold War, and the emergence of a globalized economy combined with powerful ideological influences of neo-liberal and corporate elites largely sounded the death knell for progressive education. Transmissive teaching, traditional instruction, standardized curricula, measurable inputs and outputs in the form of learning outcomes, large-scale testing, and harsh accountability regimes transformed Western education in the second half of the 20th century. The progressive purposes of education, the development of the child as a human-being-still-becoming were largely transplanted by commodifying the child's *self* in the service of the economic system.

While no one is advocating for a return to the schools of the 1930s, it is instructive to situate today's New Pedagogies for Deep Learning (Fullan & Langworthy, 2013) and 21st century teaching and learning in the narrative of a longer educational story that leads to the concept of the Living School. Dewey and the other architects of progressive education were 19th and early 20th century people. The "why" of education for them was influenced by the historical and cultural realities of that time. The aim of education was to counter the destructive influences of the juggernaut of industrialism that was transforming society, displacing communities and households as the centres of production, and responsible for mass urbanization and global migration into cities. The factory model was powerful in shaping all aspects of life including schooling. The progressives countered these forces with a focus on individual development through experiential, real-world learning that strengthened community, cooperation, civic mindedness, and the democratic ideal.

Early in the 21st century we face different challenges for which our education systems also seem unsuited. Globalized systems, rising levels of inequity between rich and poor, and social, economic, technological, and ecological change are unprecedented, and the disruption is keenly felt at all levels. Again, we look to education for a response. The education initiatives of 21st Century Teaching and Learning (Griffin, McCaw & Care, 2012) and Education for Sustainable Development offer skills and competencies enhanced by emerging digital technologies that will prepare learners for new realities. The past preoccupation with raising test scores through standardized curricula and testing has been deemed a failure for developing

the creativity, innovation, problem-solving, and critical thinking required to flourish in this new century (Ravitz et al., 2012). Each initiative signals a re-emergence of progressive ideals, but for very different purposes, and each has influenced the Living Schools concept. Let us begin by looking at Education for Sustainable Development.

Education for Sustainable Development

If there is one recent conceptual approach to organizing education to which the Living Schools can be most directly linked it is Education for Sustainable Development (ESD). The overarching paradigm of sustainable development is based on greater equity between individuals and groups that is realized through values related to social justice, poverty reduction, and systems thinking that understands environmental, economic, and social interests as being inextricably intertwined (McKeown & Nolet, 2013). ESD was born out of the Earth Summit in 1992; Chapter 36 of the *Agenda 21* (United Nations, 1993) document presented a vision of the world's education systems educating in ways that would lead to a more sustainable future. ESD, or Education for Sustainability (EfS) as it also known in Canada, has emerged as a progressive approach to teaching and learning that is locally relevant, culturally appropriate, and addresses all realms of sustainability (environment, society, economy). In this regard, EfS is action-oriented and promotes similar competencies as 21st century learning (Council of Ministers of Education, Canada, 2012; United Nations Economic Commission for Europe [UNECE], 2012); however, with the explicit vision "to help communities and countries meet their sustainability goals and attend to the well-being of the planet and all its living inhabitants" (McKeown & Nolet, 2013, p. 7).

ESD approaches are steeped in the tradition of progressive education. The child's experience is central and the importance of building the experience of the student is recognized. Through dialogue, experimentation, and engagement with real-world issues and projects, young people are able to clarify their own and others' worldviews and to recognize alternative frameworks and futures exist. The focus on experiential learning, individualized instruction, deep learning, real-world application, cooperative learning, and creating learning tasks with direct relevance to students' lives mirrors progressive ideas. However, ESD articulates unequivocally a larger purpose for education that Dewey and his contemporaries perhaps would not have been able to envision. "ESD helps develop the capacity for critical reflection and systems and futures thinking, as well as motivate actions that promote sustainable development" (UNECE, 2012, p. 7). ESD is aimed directly at allowing education to prepare the next generation with the skills, knowledge, attitudes, and values to address our most challenging issues. And yet it is in that language there exists what has become the most strident critique of ESD, and that is the term *sustainable development*. A full critique of EfS is beyond our scope here, but suffice to say that the term *development* and the word *sustainability* have become problematic. It has been argued widely that these words have been co-opted by powerful corporate and economic interests to ensure status quo values, attitudes, and economic systems largely responsible for the ecological and societal challenges we face are, in

effect, sustained. Jickling and Sterling (2017) ask, "Is sustainability the most useful term—the term that stands to create the most effective critical traction—to serve educational interests?" (p. 3). It is a fair question.

21st Century Teaching and Learning

Global efforts are underway to re-conceptualize K–12 education for what is commonly known as 21st century teaching and learning. In Canada, provincial school curricula are being reformulated to include what are widely referred to as *21st century learning competencies* (Alberta Education, 2011; Nova Scotia Department of Education, 2015; Ontario Ministry of Education, 2016). The global move to 21st century learning is the result of well-resourced efforts by both government and not-for-profit organizations. Corporations, specifically in technology and the knowledge economy sectors, have vested interests in disrupting traditional educational structures (Ananiandou & Claro, 2009; Brooks & Holmes, 2014; Canadians for 21st Century Learning and Innovation, n.d.; Education for the 21st Century, 2017; Fullan & Langworthy, 2013, 2014; Partnership for 21st Century Learning, n.d.).

21st teaching and learning, like ESD, promotes progressive approaches. The radical change represented by 21st century education (Fullan & Langworthy, 2014) has led to project-based education and design learning. Authentic student-led design projects are recognized as powerful opportunities for creative, critical problem solving, and important skill development. The increase in popularity of the Maker Faire Movement (Kelly, 2016), a Do-It-Yourself (DIY) ethos (Knobel & Lankshear, 2010), robotic competitions, hack-a-thons, problem- and project-based learning (PBL), all enhanced by sophisticated information and communication technologies (ICTs), provide identifiable approaches for the application of the creative process. These learning opportunities offer accessible strategies and recursive steps to develop 21st century learning competencies (Stanford University School of Design, 2016).

As we have seen, experiential learning, individualized instruction, deep learning, real-world application, cooperative learning, and creating learning tasks with direct relevance to students' lives are common to progressive schooling. Twenty-first century teaching and learning offers exciting, engaging learning for students and promotes strong relationships between teachers and young people as co-learners. The initiatives represent a moving away from traditional education approaches that are transmissive, controlling, authoritarian, and demanding of compliance in behaviour and thought. The focus on creativity and imagination, collaboration, and critical thinking is hopeful, as is the renewed emphasis on the importance of student-teacher relationships. These are positive developments.

The *radical* change proposed by advocates of 21st century skills adheres to the dictionary definition of the word, a "thorough or extreme change to traditional forms" (Radical, 2013). But the word "radical" means something else too. Words can lose their lived meaning through overuse and paying close attention can re-vitalize the language and connect us to the lived experience to which the word was originally tied. The word radical is charged with the political and the subversive. Calling for radical change in education is done for intentional effect. The

word came from the Latin *radicalis* and meant "the direct source or sense" (Ayto, 1990, p. 428). It is a word rich in depth and nuance as it is related to roots and rooting. In medieval philosophy, the *radical humour* was inherent in all plants and animals, its presence being a necessary condition of life. It is this sense of the word radical that I would like to invoke regarding education reform; it is the word's connection to the fundamental, primary, essential condition of life that may help us respond to the question of "*radical* change in education, for what purpose?" When the goals of education are aligned with an ethos of *life* and *living*, the fundamental question of what we are reforming education *for* can be posed as a counterpoint to the functional, future-oriented, technology-enhanced belief in education for its neo-liberal, economic, career, and problem-solving purposes.

Looking carefully at recent documents that espouse transforming education for the skills of 21st century learning provides a clearer sense of the demands placed on education. The international project New Pedagogies for Deep Learning: A Global Partnership (NPDL), led by Canadian education consultant and scholar Michael Fullan, is well funded and highly organized, and includes partners from multinational corporations like Intel, Microsoft, and Pearson Publishing. NPDL is working with "clusters" of schools in each of seven countries. The goal is to build collective capacity within and across education systems and "to call to action, engage partners in the common purpose to mobilize deep learning, capture and cultivate new pedagogies that advance deep learning, and continuously measure and analyze what is working" (Fullan & Langworthy, 2013, pp. 19–20). The NPDL white paper *Towards a New End: New Pedagogies for Deep Learning* (Fullan & Langworthy, 2013) begins by describing "the crisis" in public education, namely student disengagement and teacher frustration. Fullan and Langworthy (2013) explain the crisis in education is "intrinsic to our societies' transition to knowledge-based economies and global interdependency, enabled and accelerated by technology" (p. 1). The authors add, "Amid the challenges, we have begun *defining the what*: new goals for learning relevant to this new era. However, the immediate and expansive attempts to *innovate the how*; the process of education—are urgently required" (emphasis in original, p. 1).

While the "what" and the "how" of education are the central concerns of the ambitious global initiative, the "why" is less well developed. Fullan and Langworthy (2013, 2014) attempt to address the "why," the larger purpose of the global education reform initiative, by explaining that the NPDL partnership,

> seeks to renew our goals for education and learning to include skills that prepare learners to be life-long, creative, connected problem solvers and to be happy, healthy individuals who can contribute to the common good in today's global interdependent world. We need learning systems to encourage youth to develop their own visions about what it means to flourish and equip them with the skills to pursue these visions. (2013, p. 2)

On the surface this seems to be perfectly reasonable. Who would not want children to be happy, healthy, flourishing people equipped to be successful in a complex and changing world? Yet, a claim like this becomes problematic when framed in the language of crisis and in an

apparent value-neutral way that leaves young people to "develop their own visions" about what it means to flourish and "contribute to the common good." In this way, the authors avoid the "why" of education for an instrumental, functional view tacitly related to "happiness, health, and flourishing" but the larger vision is never fully articulated.

The virtual absence of a purpose for learning, and a reticence to articulate that to which the learning points, is problematic. A functional bias toward preparation for the knowledge economy, a fear of being left behind in a competitive global race for economic dominance is betrayed in Fullan and Langworthy's language describing teachers as "human capital" who have "social capital (the relationships with students, parents and community)" and "decisional capital (negotiating the challenging learning experience)" (2013, p. 13). The language of "capital" has symbolic and rhetorical power. It speaks to the tacit purpose of education reform for 21st century learning—to protect and strengthen the social and economic status quo firmly anchored in a market-based, competitive economic ideology. It is in this sense that the education transformation 21st century learning intends to represent is not the *radical rethinking* of education it positions itself to be.

Living Schools and the Why of Education

The pioneers of progressive education working at the end of the 19th and early decades of the 20th century were responding to the social, political, and economic realities of their day. The larger purposes of education, as the progressives envisioned them, were shaped by strong democratic principles and the values of equity, diversity, the importance of individual freedom, agency, and experiential learning for human becoming. The education they worked hard to attain was at cross-purposes with the powerful market-driven values of schools as training grounds and labour pools for a burgeoning industrialized economy. The echoes of the factory model of schooling can still be heard today in the ringing of bells and buzzers to move students *en masse*; it can be seen in neat rows of individual desks, felt in the asphalt and chain-link of school yards, and understood in fragmented curricula cloaked in the language of outcomes and test scores.

Today we face issues and challenges that would be unimaginable at the turn of the last century. One of most pressing existential questions for education that is generative and generational is how humans as a species will continue to live well and sustainably on this planet. David Orr (1992) presents succinctly a purpose and vision for education in which the goal is not merely deeper *learning* and new pedagogies but learning *toward* life and making connections. Orr (1992) writes of his vision for education:

> First, it aims toward the establishment of a community of life that includes future generations, male and female, rich and poor, and the natural world. The essence of community is recognition, indeed celebration, of interdependence between all parts. Its indicators are the requisite sustainability, peace, harmony and justice and participation. (p. 138)

Orr is advocating for a vision of education that is progressive but also encompassing, expansive, generous, affirming of all life, inclusive of the more-than-human, and reaches toward a place of deep transformation. The discourse of 21st century learning is one in which there is confidence and power, a techno-optimistic, and future-facing resolve that education, or more aptly, learning, specifically deep learning, will conserve a way of life founded on intensely held cultural beliefs about progress, growth, development, competition, and technology. Education has not been a panacea for the world's ills; as education levels rise so too do the myriad issues related to unsustainable consumption and inequities in the distribution of wealth. Students will only "develop their own visions about what it means to connect and flourish" (Fullan & Langworthy, 2013, p. 2) when educators, researchers, policymakers, and all stakeholders radically deepen a sense of interconnectedness, earth-centredness, and humility that are both accepting and mindful of the paradoxical relation of the flux, uncertainty, and unpredictability of life.

Living Schools are created on a shared vision for education that is life-forwarding. It is a vision of education that differentiates between what the philosopher John McMurtry (1998, 2002) calls the life-code value versus the money-code of value. He characterizes the dominant economic system that has fully been absorbed into culture, policy, government, education and our daily understanding of "reality," as a system that promotes money and the market above all else. McMurtry (1998) describes the dominant market system as a *value code* "that underlies people's normal decisions and actions [and] is one that affirms more money revenues as good and rejects less money revenues as bad" (p. 297). He calls this largely unquestioned principle of value and disvalue the *money-code of value*. It is represented simply as,

Money → Commodity for Sale → More Money

Money is the beginning and the end of the sequence. In opposition to the money code of value, McMurtry (1998, 2002) proposes the life-code value. The life-code value is represented by the following sequence.

Life → Means of Life → More Life

McMurtry defines life as "organic movement, sentience, and feeling, and thought" (1998, p. 298). Means of life is "whatever enables life to be preserved or to extend its vital range on these three planes of being alive" (p. 298) such as clean air, water, nutritious food, shelter, affective interaction, environmental space, and accessible learning conditions. Maintaining these conditions reproduces life; augmenting and deepening them increases life-value. Essentially, it is life-forwarding and life-affirming.

The codes of value—money and life—are different in that in the money-code of value money is the beginning of the value sequence and money is the end of the sequence. "More money," says McMurtry (1998), "and not more life is the regulating objective of thought and action" (p. 299). The more money that returns to the investor regardless of what happens to life, the better the investment.

Life values are beginning to re-assert themselves and it is these values that must guide discussions of 21st century education. McMurtry's life-code value offers a theoretical construct for an alternative value system with which most people are already familiar. It manifests itself in people's lives everyday as the *civil commons*. The civil commons are what people ensure together to protect as distinct from the money-code of value logic. Universal health care, parks, green spaces, volunteer service groups, fire protection, clean water, food inspection, good government, a justice system, libraries, and public education are all examples of what, as Canadians, we believe are life-based and life-protective. These are, as part of the civil commons, oriented to life values, not money values. Commodifying any of these or attempts to turn them over to market-based, private, for-profit entities are met with great debate and resistance from Canadians. These are all life-affirmative forms of capacity building and allow society to protect and enable open access to life goods or the means to life.

These are values built on human agency and enable access for all community members, not just a privileged few, to grow and express themselves. The community may be local, national, or global. In a life-code value, education is a life-good, both public and individual, and is not a commodity. Children and young people are not commodified learners, future knowledge workers, consumers, or human capital. Children are on the path of human "becoming." They need pedagogical relationships with teachers entrusted to lead them in search of meaningful lives and the beauty of their full potential as flourishing individuals.

Living Schools understand themselves to be in the service of life, and a life-code value speaks to larger purposes that form the ethos of the school. In a Living School, teaching and learning take on new meaning and vitality when allied with a life-affirming purpose. Twenty-first century education is inherently experiential, and working experientially offers a way to formulate alternative interpretations of reality, interpretations based on our felt contact with the world, that can challenge taken-for-granted historical and cultural beliefs largely shaped by the money-code of value. Education in a Living School is interactive and dialogic. Building an experiential sense and involvement in the community of life develops awareness of how we are connected, interdependent, and intertwined, undoing an individualistic, competitive, isolating experience of the world. The experiential pedagogies of 21st century deep learning and progressive education, when aligned with a larger purpose as reflected in the life process, give authority to our experience. Student and teacher emotional and physical well-being can be supported through the open sharing of experiences that move toward actions that are *for* the life process, rather than against it, and that work to embrace all of the living world.

Education in the service of life has, as its fundamental goal, the life-forwarding steps that emerge from making authentic contact with the world. This approach takes advantage of the creativity inherent in the life process, the uncertainty, the new meanings, and the possibilities that arise with the unfolding of experience. Organizing the education of the young based on life-forwarding principles grounded in the world—the social world, the human-built world, and the natural world—can foster contact and dialogue *with* the world and, in so doing, schools become Living Schools that organize learning in ways to enhance *well-being for all, sustainably*.

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Chapter 3

Living School Attributes and Practices

PATRICK HOWARD & CATHERINE O'BRIEN

Developing the Living Schools Attributes and Practices framework (Howard & O'Brien, 2018) has been a work in progress. We integrated research literature with our own experience in schools that are thriving. Our aim has been to capture the elements or attributes that contribute to transformative education that embraces sustainability and *well-being for all*. Discussions with educators led to further modifications and we anticipate that the framework itself will continue to be refined as a living document. In this chapter, we elaborate on Living Schools attributes and provide examples that have been shared with us as educators while developing the Living Schools Discussion Chart. We conclude with two brief portraits of an elementary school and a high school that both demonstrate the attributes in practice. For ease of reference we have inserted the framework again in this chapter (see Figure 1 on the next page).

Values and Vision

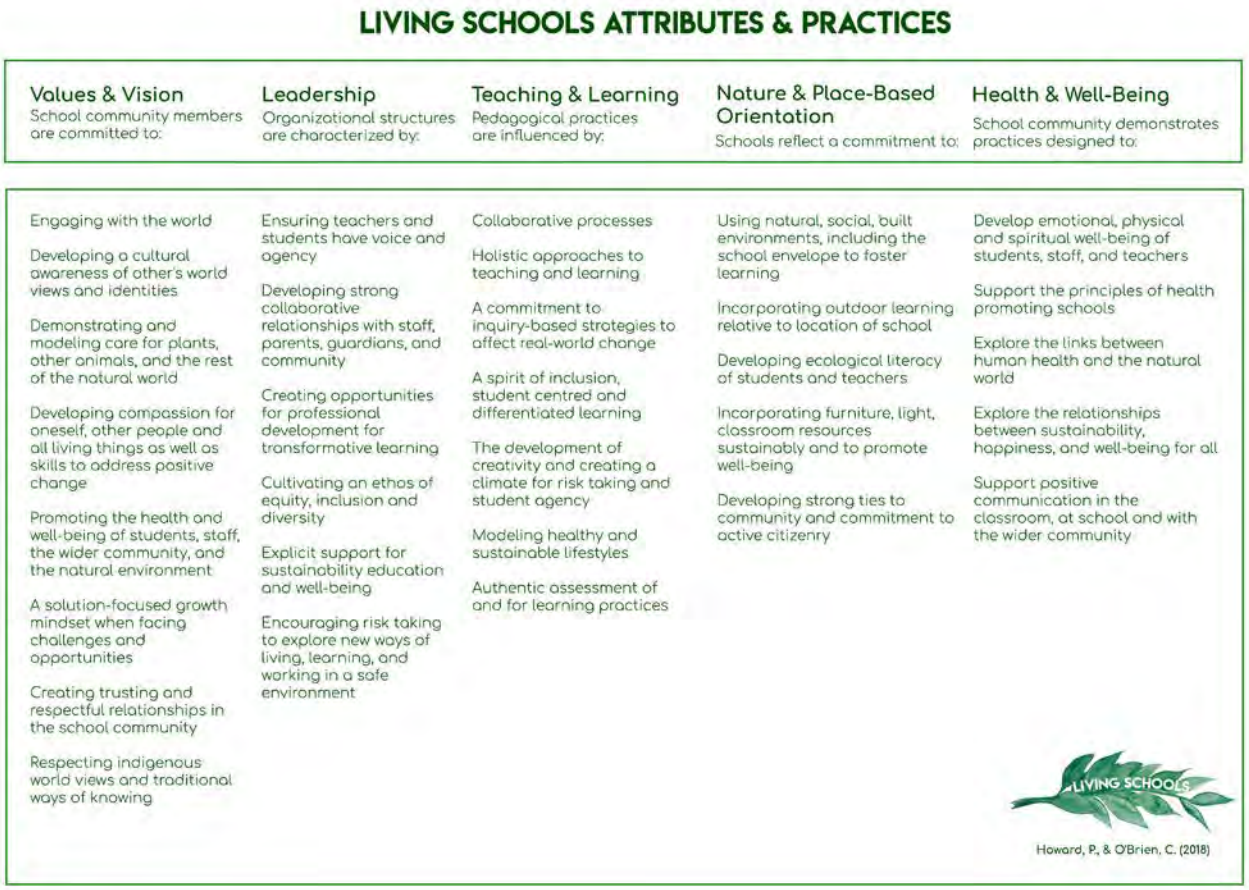
Values and Vision:

- Engaging with the world
- Developing a cultural awareness of other's world views and identities
- Demonstrating and modeling care for plants, other animals, and the rest of the natural world
- Developing compassion for oneself, other people, and all living things, as well as skills to address positive change
- Promoting the health and well-being of students, staff, the wider community, and the natural environment
- A solution-focused growth mindset when facing challenges and opportunities
- Creating trusting and respectful relationships in the school community
- Respecting Indigenous world views and traditional ways of knowing

(see http://creativecommons.org/licenses/)

C. O'Brien & P. Howard (Eds.). (2020). *Living schools: Transforming education* (pp. 25-44). Winnipeg, MB: ESWB Press. ISBN 978-0-9939534-2-2. Retrievable from www.ESWB-Press.org

Figure 1
Living Schools Attributes and Practices Framework (Howard & O'Brien, 2018)



Values and Vision establish the foundation for Living Schools, and the attributes and practices in this section reflect values that are widely embraced by schools throughout the world. Our aim is to make these values explicit and to underscore the need to be inclusive of the natural world. This includes demonstrating and modeling care for plants, the other-than-human animals, and the rest of the living world—not just presenting the natural environment in a solely intellectual process through discrete subjects.

Compassion has been identified as a pathway to experiencing a connection with nature (Lumber et al., 2017) and self-compassion has been associated with other-focused concern (Neff & Pommier, 2013) and with emotional resilience. Considering the mental health challenges that many staff and students face, a focus on self-compassion warrants our attention for promoting healthy school environments.

> One of the most robust and consistent findings in the research literature is that people who are more self-compassionate tend to be less anxious and depressed. The relationship is a strong one, with self-compassion explaining one-third to one-half of the variation found in how anxious or depressed people are. This means that self-compassion is a major protective factor for anxiety and depression. (Neff, 2011, p. 110)

Many educators have expressed concern that their students feel excessively defeated when they experience "failure" rather than exhibiting the resilience to address issues that arise and grow from the experience. Fostering self-compassion and focusing on learning goals over performance goals can strengthen resilience and facilitate the development of a solution-focused, growth mindset (Neff, 2011).

Falkenberg (2014) writes that,

> the well-being of students has always been a concern in school education. However, such concern seems often more implicit than explicit, seems grounded in a more narrow rather than a more comprehensive and holistic conceptualization, and is generally not seen as the overarching goal of school education. (p. 77)

Recognizing the validity of this statement we have emphasized student and staff well-being throughout the attributes and practices framework and positioned well-being within the Values and Vision sector. The overarching education vision of *well-being for all, sustainably* extends the well-being scope by incorporating sustainability.

As noted in the previous chapter, new pedagogies for deep learning have gained traction in education circles around the world. In addition to enriching deep learning with sustainability principles we also advocate the benefits of acknowledging that Indigenous knowledge and other ways of knowing are not "new" but are essential attributes and practices in Living Schools. Building on this perspective we could add practices such as mindfulness, meditation, and yoga as other ways of knowing that will enrich Living Schools.

Some of the ways that educators have described how these attributes and practices are manifested in their school are through their participation in programs offered by non-governmental and charitable organizations such as WE schools and the Global Cardboard Challenge, governmental educational initiatives like Treaty Education (learning about the treaty rights of Indigenous peoples and non-Indigenous people), school gardening (particularly Little Green Thumbs), indoor vertical gardening, volunteer activities, high-school horticulture clubs, LGBTQ clubs, and healthy eating and nutrition programs.

Leadership

Leadership:

- Ensuring teachers and students have voice and agency
- Developing strong collaborative relationships with staff, parents, guardians, and community
- Creating opportunities for professional development for transformative learning
- Cultivating an ethos of equity, inclusion, and diversity
- Explicit support for sustainability education and well-being
- Encouraging risk-taking to explore new ways of living, learning, and working in a safe environment

The Living Schools framework is built on the understanding that schools are part of a community, an eco-system, often in a network of schools, and guided by progressive, inclusive governance structures set down by local government or a similar authority. Transitioning to a Living School model and sustaining the vision, values, and interrelated components of the Living School framework is determined through mechanisms that include all stakeholders. It requires enlightened leadership and governance structures for scalable, system-wide reform (Howard et al., 2019). It means providing students, teachers, parents and caregivers, and community members with voice and agency in determining the Living School journey. Discussions outside the school can engage community groups, local employers, industries, and higher education institutions as they will have particular interest and valuable input on the vision of teaching and learning in a Living School and how it will contribute to future employees, entrepreneurs, community members, and students in post-secondary education.

In the establishment of any transformative schooling model it is essential for the principal, with the support of the school board or other educational authority, "to be the chief risk-taker for the school—a role rather different from the principal's role today in most systems" (Brooks & Holmes, 2014, p. 42). This also holds true for the successful transition to a Living School. Principals are called upon to manage a system that innovates through trial and error. Principals are entrepreneurial and guide learning professionals and young people towards successful integration of the Living Schools framework and onto the next stages of their learning journeys.

Though governments and school boards set learning outcomes, teachers and other learning professionals are free to draw on their expertise and from a vision of teaching and learning reflected in the Living Schools framework to help guide learners towards the best way of reaching their learning goals. To this end, school principals work with teachers and learners to find the most powerful learning methods for each context. Research carried out in British Columbia has shown that teachers become most engaged when they see themselves as key contributors to students' learning and development. Teacher engagement and well-being has been shown to increase in schools where teachers are supported to work with colleagues in

schools while given high levels of autonomy. This level of agency "provided high satisfaction and increased teacher engagement" (Naylor & White, 2010, p. iii). Conversely, where these factors are absent or negative, teacher stress and attrition are likely to increase.

Every school we have encountered that reflects the attributes and practices of a Living School demonstrates the essential ingredient of inspired leadership, from administrators and teachers. Principals or vice-principals have both instigated progressive programs and processes, and championed the desire for their staff to do so. There is a culture of mutual support and risk-taking where educators feel endorsed to explore new practices, to collaborate with colleagues, and to celebrate their successes. We have met school teams that have healthy relationships and rally to bolster one another during stressful times or through individual challenges that may be personal or professional. Initially there may be an intentional focus on either sustainability or well-being (perhaps through healthy schools) but the most powerful combination occurs when both education for sustainability and well-being are woven into the fabric of the school culture. In some cases, the focus on well-being may emerge as staff discover that their use of new pedagogies, outdoor learning, or action research has had the unexpected outcome of enhancing student well-being and their own. Integrating sustainability with well-being supports the education of *well-being for all* and is, in a nutshell, the superpower of Living Schools.

Educators who have completed the Living Schools Discussion Cart identify administrators and superintendents who support growth through encouraging teachers to explore new pedagogies, engaging with meaningful professional development, and creating a culture of inclusion. Multicultural events, parent councils, and fundraising for the community have also been mentioned. Some sustainability initiatives include recycling, composting, school gardens, fundraising to purchase reusable containers for lunches, environmental education, and completing energy audits.

Teaching and Learning

Teaching and Learning:

- Collaborative processes
- Holistic approaches to teaching and learning
- A commitment to inquiry-based strategies to effect real-world change
- A spirit of inclusion, student-centred and differentiated learning
- The development of creativity and creating a climate for risk-taking and student agency
- Modeling healthy and sustainable lifestyles
- Authentic assessment of and for learning practices

Holistic, systems, and integrative approaches to teaching and learning help us become more aware of our deep connections to family, community, place, and the living world on which we depend entirely. Teaching and learning that is organized to promote interdisciplinary, cross-curricular collaboration develops in young people the knowledge, skills, and dispositions to more deeply understand how change in one part of the world can impact other parts, as well as an awareness of how choices today can impact tomorrow's world.

The challenges facing individuals, families, communities, and countries are complex and require inputs from a range of disciplines to address them, including perspectives on natural, social, and economic systems. Different cultures and world views provide valuable insights; at the most fundamental level, thinking, acting, and living sustainably means connecting individuals and groups to other people, locally and globally, and to the natural world. Holistic teaching and learning imply ways of thinking and acting that reflect these interrelationships and the creative possibilities that they engender. Open, inquiry-based learning in the spirit of discovery spurred by students' genuine interests and connected to the larger community allows children to demonstrate their learning in ways that are authentic and meaningful. As well, the learning may potentially result in real-world change. Active learning promotes movement, time outdoors in the natural world and in the community, while it develops physical well-being, socialization, and citizenship.

Living Schools promote individualized instruction differentiated to meet the needs of the child. Assessment practices reflect growth and progress as well as achievement against known standards. Assessment practices are designed to allow students to demonstrate their learning through a balanced approach of doing, saying, and writing. Performative assessment highlights a range of skills, dispositions, and attitudes to promote a holistic sense of student learning thereby providing teachers and the larger community with a more complete picture of the student across a range of diverse learning modalities.

Within this column of the Living Schools framework, educators have identified the benefits of collaborative teaching and planning. One teacher, for example, introduced Genius Hour (reserving class time for students to work on inquiry projects of their choice) to his class with the support of a colleague who had more experience with the pedagogy. Others mention individual program plans (IPPs), flexible groupings for students, and trauma-informed practices. Many discuss their enthusiasm for real-world, project-based learning that contributes to sustainability and greater awareness of sustainability amongst staff and students.

Nature and Place-based Pedagogies

Nature and Place-based Pedagogies:

- Using natural, social, built environments, including the school envelope, to foster learning
- Incorporating outdoor learning relative to location of school
- Developing ecological literacy of students and teachers
- Incorporating furniture, light, classroom resources sustainably and to promote well-being
- Developing strong ties to community and commitment to active citizenry

Living Schools are deeply connected to the larger living world. The overarching purpose is education for sustainable living and well-being. Central to this aim are pedagogies and a school ethos that supports this larger purpose by teaching the basic principles and realities of ecology. This teaching cannot be separated from a deep respect for the living world experienced by an integrative and participatory curriculum.

It is in this way that children and young people come to understand, as Stephen Sterling (2010) puts it, that we don't live *on* the Earth; we live *in* the Earth. Human beings are part of the web of life, deeply connected and enmeshed in the Earth's dynamic, life-giving systems. Children can come to know this interconnectedness experientially by exploring their embeddedness in a specific landscape or bioregion with very unique plants, animals, watersheds, and weather systems that directly influence social patterns and cultural practices.

A Living School whether urban, suburban, rural, or remote is deeply connected to place. Teaching and learning may be described as place-based and place-responsive. Teachers in Living Schools include more local experience, inquiry, action projects, and reflection in their practice. Mandated curriculum outcomes are realized not through de-contextualized learning objectives but by using powerful learning approaches connected to the community, and the natural, social, and built environments of the school.

Too often local knowledge and a focus on what is close at hand is seen as parochial or backward. Yet we are intuitively aware of how developing local solutions to local problems is the most appropriate and relevant strategy in mobilizing community action. Fully engaging young people to take action within the community will better prepare children for active, engaged citizenship and provide them with the skills to be adaptive and resilient to larger global forces. A Living School can be a nexus to re-establish long-standing relationships between community groups with the goal of building sustainable, healthy communities.

There can be considerable overlap between initiatives and processes within Teaching and Learning and this attribute's focus on Nature and Place-based Learning. For instance, teachers have identified items such as a student-run greenhouse, outdoor classrooms, Litterless Lunches, or natural playgrounds as examples of these attributes and practices. They have also provided numerous examples of project-based learning (PBL)—particularly PBL that is applied to the local community.

Health and Well-being

Health and Well-being:

- Develop emotional, physical and spiritual well-being of students, staff, and teachers
- Support the principles of health promoting schools
- Explore the links between human health and the natural world
- Explore the relationships between sustainability, happiness, and *well-being for all*
- Support positive communication in the classroom, at school, and with the wider community

Living Schools have been ahead of the curve with the emphasis on well-being. We say this in part because schooling has been caught in the grip of the "Age of Achievement and Effort" (Hargreaves et al., 2018). Student achievement has been so paramount that inordinate amounts of time and resources have been harnessed to achieve "success" in this domain. Student (and staff) well-being can be overlooked in the process.

> The OECD's 2017 report on global metrics concerning child well-being and quality of life noted that many nations that had high achievement scores coupled with low scores of well-being and happiness were the same nations most often criticized for extensive uses of standardized testing. (Hargreaves et al., 2018, p. 6)

Tracking the transitions across education sectors in Ontario, Canada, the authors of *Leading from the Middle* (Hargreaves et al., 2018) state that the education sector is transitioning from the "Age of Achievement and Effort" towards the "Age of Learning, Well-being, and Identity." The more explicit attention on student well-being reinforces the long-standing work on health-promoting schools that have steadfastly maintained that student and staff well-being merit greater attention and are intertwined with student success. In Canada, in addition to its focus on physical well-being, the Joint Consortium for School Health (JCSH) has also taken the lead on developing superb resources for positive mental health (Morrison & Peterson, 2013). The JCSH Positive Mental Health Toolkit is available at no charge. The Education for Sustainable Well-Being (ESWB) Research Group at the University of Manitoba has also been a leader in interdisciplinary research regarding sustainable well-being and education. In 2011, the ESWB Research Group was founded at the University of Manitoba. The group organized a series of conferences on the role of education for environmental sustainability and human flourishing and published two e-books with the ESWB Press in the area of education for sustainable well-being.

Positive communication—communication that is aimed at increasing well-being (Muñuz Valázquez & Pulido, 2018)—is an emerging field that has been influenced by positive psychology and the study of well-being. According to positive psychologist Martin Seligman (2011), there are five elements to well-being which he outlines using the acronym PERMA:

> Well-being theory has five elements…. The five elements are positive emotion, engagement, meaning, positive relationships, and accomplishment. A handy mnemonic is PERMA. (2011, p.16)

Positive emotion is essentially about having a pleasant life and is measured subjectively (i.e., you would determine how satisfied you are with your life rather than someone else making that assessment). *Engagement*, also measured subjectively, is about being fully immersed in an activity. It could be a flow state where your sense of time stops or you feel fully present. *Meaning* refers to having a sense of purpose, usually committed to someone or something that feels "bigger than you." This too, would be measured subjectively, but it could also be judged by others. Seligman (2011) suggests, for example, that a person's life contributions can be deemed meaningful, or not, both by the individual and by others. *Positive relationships* are fairly self-explanatory. You have likely recognized in your own life that the state of your relationships with others has a tremendous impact on your experience of well-being. *Accomplishment* is about achieving something for its own sake. Seligman suggests that this consists of pursuing success, mastery, and even winning (O'Brien, 2016).

Positive communication makes great sense when placed in the context of Seligman's framework for well-being (PERMA) when we consider how positive communication can contribute to positive emotions, being engaged, healthy relationships, deepening one's experience of meaning, and sense of accomplishment—individually and collectively. In school settings, we can pay attention to how our communication with students, amongst staff and with the wider community, contributes to, or detracts from, well-being. Positive communication would be integral to Carney's (2015) view of school-based approaches to well-being for students as staff. His model places strong caring relationships at the centre. (See Chapter 15 for a discussion of the Carney Well Aware Model for schools).

Living Schools align with the transition towards the *Age of Learning, Well-being, and Identity* and, in many ways, go much further as we are advocating a broad view of well-being that incorporates the natural world and is inextricably linked with sustainability. This is an essential perspective across all of the attributes and practices. For instance, positive relationships can occur between people and also between individual/communities and ecosystems.

Most schools have events that promote health and well-being, but Living Schools strive to incorporate wellness into the school culture rather than relying upon a yearly event to model healthy living. Examples that educators have shared are walking clubs, yoga classes (for students and staff), MindUp (mindfulness program), practicing mindfulness as a staff, establishing a fitness centre, opening the school to community groups, school teams that are committed to Health Promoting Schools, school-wide adoption of Caring Schools, and restorative practices where conflicts are resolved "in circle."

In the forthcoming chapters you will read more about the pioneering actions that schools are taking within the framework of Living Schools. Before leaving this chapter, however, we want to emphasize that even though we are discussing the attributes and practices in categories that suggest that each category is distinct, it's clear that many initiatives span across categories. Real-world, project-based learning that has a sustainability focus within the local community,

for example, can be designed to meet many of the attributes and practices, such as demonstrating and modeling care for plants, other animals, and the rest of the natural world; explicit support for sustainability education and well-being; a commitment to inquiry-based strategies to affect real-world change; exploring the links between human health and the natural world; and developing strong ties to community and commitment to active citizenry. To solidify how this holistic aspect of the framework can be realized we offer a brief portrait of two schools, Cookshire Elementary in Quebec (Canada) and Riverview High School in New Brunswick (Canada).

Cookshire Elementary, Quebec

Figure 2
Mural in Cookshire, Front Hall

In the fall of 2017, Chris Adam, the Sustainability Coordinator at Dawson College in Montreal, led a series of workshops that engaged Cookshire Elementary students with nature,

both indoors and outside. Observing the impact this had on the students, the Cookshire staff were convinced that integrating nature more fully into their teaching practice and school design would enhance student well-being and particularly benefit students who were struggling with anxiety. By December of that year, the staff voted unanimously to become a Living School. They chose to start with a focus on nature with specific activities for each grade as well as whole-school projects. They began with a week-long garbage audit. At the end of each day they collected the whole school's garbage and divided it into true garbage, compost, and recycling. Then they weighed each of these. What they discovered shocked not only their students but their staff as well. Only 9% of what they threw away was true garbage. Following the garbage audit, they added recycling to their cafeteria and began composting as well. The town of Cookshire does not yet have composting, so a staff member takes the compostable refuse home.

By June 2018, Cookshire hosted a celebration event to officially launch their Living School. School board officials, the media, Dawson staff, the St. Francis Naturalist Club (that had sponsored Chris Adam's workshops), and I (Catherine) attended. It was remarkable and inspiring to see what this small rural school had accomplished.

Figure 3
Insect Hotel: Bugz Inn

There was an official opening of an insect hotel (Bugz Inn), a ceremonial planting of the first bush in their edible hedge, a pollinator garden already in place, and an outdoor learning space. Indoors, a colourful mural graces the front hall, depicting the values they are embracing. The Grade 1 class shared their worm composting project with us. Other grades presented their work on the impact of plastic on ocean species. A Grade 5 student proudly told us about the mural that displays what students said makes them feel happy. There was a butterfly incubator area as well as a "Curious George wall" where students could post questions that they are

curious about. Students were also painting bee boxes for a local bee keeper.

Figure 4
Painted Beehive Boxes

When residents in the community heard about Cookshire's desire to be a Living School, businesses were eager to help, donating funds and a rain barrel. Other plans are under development and will depend on further fundraising efforts to some extent. An outdoor sensory garden is planned. This is a garden that is specifically designed to stimulate senses through sound, scent, and sight. Some initial steps have already been taken to convert part of a classroom into an Oasis Room where students can come to feel calm and relaxed. Two small living walls will divide the Oasis Room from another section of the room that is needed for other activities.

Cookshire's commitment helps us to see how the Living Schools attributes and practices effectively work in concert. There was leadership from the community (the St. Francis Naturalist Club, Dawson College, and Chris Adam). The staff have demonstrated remarkable leadership and a process whereby staff and students are engaged, provided explicit support for sustainability education and well-being, as well as encouragement for risk-taking as they boldly voted to become a Living School and set out to determine what their next steps would be. They are declaring their values through the Living School wall mural and through conversations amongst themselves, with students and other colleagues, and with the broader community and the media. They are excelling at demonstrating and modeling care for the living world, and in creating trusting and respectful relationships in the school and community; more attributes and practices will surely emerge as their plans unfold. One of the outstanding attributes that was clearly present during our Living School tour with Cookshire was the emphasis on inquiry. Students were excited to present what they had been learning and there

was definitely the sense that students were enjoying the inquiries they had followed. In fact, some Grade 6 students had asked why so much fun stuff was starting to happen just as they were about to graduate from the school!

Nature and placed-based learning are the central focus of Cookshire's Living School and their efforts touch on every attribute in this category. The two most evident attributes and practices related to Health and Well-being are exploring the links between human health and the natural world and exploring the relationship between sustainability, happiness, and *well-being for all*. The painted tree in their front hall reflects other health and well-being values that will doubtless emerge more prominently in the coming years.

Looking collectively at all of these accomplishments, we can see that Cookshire's foray into becoming a Living School already reflects many of the attributes and practices in the Living Schools framework. We can also see how the attributes intersect by considering how a single project, such as the pollinator garden, spans several categories. The value of demonstrating and modeling care for plants, other animals, and the rest of the living world is present; the leadership of explicit support for sustainability education and well-being is evident in the creation of the garden; the outdoor learning pedagogy encourages student agency as they can make real-world projects that contribute to the environment; the school envelope is being used to foster learning; and they are contributing to a vision of *well-being for all*, where the relationship between human and ecosystem health are part of the fabric of their school.

Cookshire's initial inspiration was around connecting students with nature. For Riverview High School, in New Brunswick, Canada, the inspiration comes from a different, and equally valid, direction.

Riverview High School, New Brunswick

When Chris Ryan and Ian Fogarty set out to fundamentally shift how teaching and learning was happening at Riverview High School (RHS) in Moncton, New Brunswick, they realized the amazing opportunity and the daunting challenge that was before them. Both Chris and Ian are passionate about student-led, inquiry-based learning that is connected to real-world problem solving. Chris, a philosophy and math teacher, explained that he first realized the power of a project-based approach to learning during his undergraduate studies at the University of New Brunswick. "I was fortunate to attend Renaissance College at UNB. I did a Bachelor's degree in philosophy that was discussion based, student centred, and advocated experiential, inquiry-based teaching methods," Chris explained. "I knew the power of this kind of learning and I wanted to apply it to the high-school setting on a larger scale than just in my own classes."

Teaming up with his colleague Ian Fogarty, a lead teacher in science and technology, the two set out to shift how teaching and learning traditionally happens in high school. Both Chris and Ian know that learning through collaborative projects places students in realistic situations that draw on a much richer set of skills than conventional lessons do. It is this type of teaching and learning that is the defining characteristic of the pedagogy in a Living School. The major

advantages of inquiry and project-based learning (PBL) has led several education groups to advocate this approach.

Figure 5
Community Exhibition

According to Larmer (2015), the advantages of a project-based approach are related to the following:

- Students begin with a real-world problem of interest to them. This provides both context and motivation for them to learn the concepts and skills they need to address the problem.
- The project format pushes students to take the initiative to identify what they need to know, and then to go out and find the information.
- Over the course of a long-term project, students gain experience at giving and receiving feedback, reflecting on this feedback, and revising their project.
- The project leads to a definite outcome, a new idea, action, or object that is the product of students' effort.
- Students learn to present this product to a public audience, gaining valuable experience at public speaking and the arts of presentation. The knowledge that they will present their results in public helps motivate students to do their best work.

Using these essential design elements, the two RHS teachers teamed up with a group of like-minded colleagues, as well as a core group of student leaders, to design a whole-school, project-based learning experience. Out of this effort the *Human Project* was born.

Featuring this predominantly bottom-up effort to transform high-school learning in a way that aligns with the Living Schools framework is important. Early childhood education and post-secondary education have been the subjects of much debate and change; however, high school—where children become young adults and determine their future paths—is "a comparatively neglected piece of the puzzle. High school is often perceived as a means to an end—a pipeline through which the highest-scoring students are funneled toward post-secondary institutions or careers—rather than a crucial period of a person's intellectual, emotional, and ethical development" (Brooks & Holmes, 2014, p. 5). After they had attended my (Patrick) research presentation on the subject of teacher risk-taking in the classroom, Chris and Ian approached me about getting involved in their project. They were aware of the challenges that lay ahead and wanted to document the school's journey. I agreed to help.

Challenging Question

The Riverview teachers and student leaders jumped into the heart of the project. The core focus became deciding on a problem to investigate and solve, a question to explore and answer. An engaging problem or question makes learning more meaningful for students. They are not just gaining knowledge to remember it; they are learning because they have a real need to know something, so they can use this knowledge to solve a problem or answer a question that matters to them. They knew the problem or question should challenge students without being intimidating. The question was written in the form of an open-ended, student-friendly "driving question" that focused their task; the question became, *what does it mean to be human?* Or, as it came to be known, the *Human Project*.

Figure 6
Theatre Students Represent Human Identity

Sustained Inquiry

In PBL, inquiry is iterative; when confronted with a challenging problem or question, students ask questions, find resources to help answer them, then ask deeper questions—and the process repeats until a satisfactory solution or answer is developed. Now that they had a deep and challenging question, teachers responsible for traditional subject areas from across the curriculum signed on to facilitate student inquiry into the question "What does it mean to be human?" The whole school class projects incorporated different information sources, mixing the traditional idea of "research"—reading a book or searching a website—with more real-world sources, such as field-based interviews with experts and community sources of information and insight. The project took place over several weeks to make room for in-depth inquiry, trial and error, chasing down dead ends, and re-grouping and re-trying when strategies did not produce the results anticipated.

Figure 7
Students Use Math to Explore the Human Form

Authenticity

Real-world experiences and applications increase student motivation and learning. A project can be authentic in several ways, often in combination. It can have an authentic context, such as when students solve problems like those faced by people in the world outside of school. But most often, it can involve the use of real-world processes, tasks and tools, and quality standards, such as when students plan an experimental investigation or use digital editing software to produce videos approaching professional quality. It can have a real impact on others, such as when students address a need in their school or community (e.g., designing and building a school garden, improving a community park, helping local immigrants) or create something that will be used or experienced by others. Finally, a project can have personal

authenticity when it speaks to students' own concerns, interests, cultures, identities, and issues in their lives.

Figure 8

Creative Representation of Human Food

The Projects

In each course in the high-school curriculum students were encouraged to connect in ways that were meaningful to them with the big question, *what does it mean to be human?* After some debate and deeper questioning, the students in the business class landed on a most *human* concern, our relationship with food. From there they moved through aspects of food security, the fast-food industry, and onto the question of the human relationship with the animals we eat as food. The students probed the question through engaged and lively discussion about the documentary *Cowspiracy: The Sustainability Secret* (Andersen & Kuhn, 2014). The business teacher was animated in his description of how the students explored the topic through various sources, prepared debates, looked at the issues from multiple perspectives, and then prepared their findings in the form of a creative, interactive art piece designed to raise awareness about the ethical considerations inherent in the animal-agricultural industry.

Figure 9

Design Planning for Human Brain Model

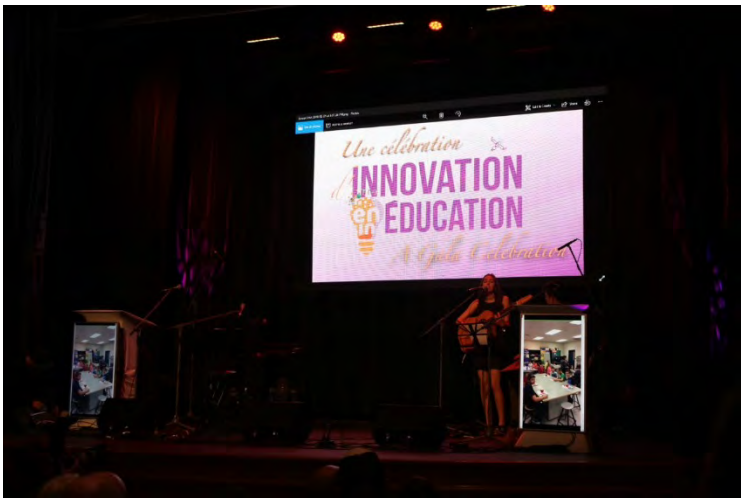
Pre-calculus students in Grade 11 used mathematics to discover what makes humans different from other species. The students looked closely at the unique physical abilities possessed by the human body and how it is able to bend, contort, and rotate. They brought their calculations to bear on human movement to reveal the unique and amazing capabilities of the human form.

The students in Grade 10 Biology chose to focus on our *defining* physical characteristic as human beings—the brain. To explain and capture the intricacies of a complex topic, the students teamed up with the woodshop class to design and build an interactive model representative of the human brain. The sections or "rooms" through which visitors would walk featured activities, elements, objects, symbols, and artifacts that corresponded to the capacity of the brain relevant to memory, emotion, logic, and the senses.

History students inquired into the darker side of what it is to be human and created an interactive Holocaust memorial that was an unforgettable experience for the students and the visitors. English students combined art, media, writing, technology, 3-D design and printing, as well as programmable devices such as Spheros and Microbits, to creatively represent human identity and culture.

Figure 10

Town Hall Presentations



The *Human Project* core student leadership group created and delivered ED Talks in the school theatre. Students researched and presented on music therapy with Alzheimer's patients, strengthening the RHS community by celebrating diversity and multiculturalism, and revolutionizing education through creativity and innovation. Students pitched their ideas in a Town Hall and competed for grant money to fund the project ideas.

The *Human Project* ended with an exhibition of the projects that was open to the community, and all teachers in the Anglophone East School District were invited to attend. Students presented their findings publicly and provided interpretation for visitors. A

magazine was compiled by the students as a record of the design and implementation of the projects

The Riverview High School experience reflects the power and potential to transform teaching and learning. Dedicated teachers acting as change agents can inspire students, parents, colleagues, and administrators to realize a shared vision. The success of the whole-school project was in large part due to the type of leadership evident in the Living Schools framework. The leadership necessary to create meaningful change ensures the voice and agency of those involved are recognized. Strong collaborative relationships are valued and risk-taking is supported to explore new ways of living, learning, and teaching. The RHS project supports Living Schools pedagogy characterized by holistic approaches, a commitment to inquiry-based strategies, the development of creativity, and real-world, authentic assessment strategies.

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PART II

EXAMPLES OF LIVING SCHOOLS

Chapter 4

The Living School, Lismore Project: Re-imagining School

JOHN STEWART

We do not inherit the earth from our ancestors; we borrow it from our children.
(Wendell Berry/Moses Cass)

Living School: The Background

In Australia, as in many other countries, the longstanding purpose of education to prepare students for future employment is having questionable success. For many twenty-first century school leavers, the journey from school to the workforce is taking longer and becoming more precarious. Consider that a child in kindergarten today will leave school in 2030. There are major concerns about employment opportunities and permanence with the perceived impact of artificial intelligence (AI), machine learning, technology, and their predicted impacts on social structures. For example, how will AI impact social interactions as we shop online away from the mall, how will automation impact on an employee's self-worth which stems from purposeful and productive employment, how will our communication via tele-screens pixelate our face-to-face communications?

This is fearful stuff. Especially if you hold the view that formal education is primarily about an apprenticeship to a career. However, I have come to believe that school ought to be a place where students learn to live well and understand how to apply positive societal values for community well-being. But are we thinking broadly enough if we only consider individual and community thriving? How are we fostering connection to the well-being of other species? Unfortunately, the disconnection for our younger generations is greater than disengagement at school—we have a generation that is increasingly detached from nature!

Schools are microcosms of community. Schools create the future leaders of community. Therefore, it is important to ask, what is the purpose of school? What if we could redesign school? What would that look like? What would improve the community of tomorrow? My answer is to create a Living School and this chapter outlines what inspired this direction, entirely independent, but compatible with the Living Schools work of O'Brien and Howard (2016).

(see http://creativecommons.org/licenses/)

C. O'Brien & P. Howard (Eds.). (2020). *Living schools: Transforming education* (pp. 47-65). Winnipeg, MB: ESWB Press. ISBN 978-0-9939534-2-2. Retrievable from www.ESWB-Press.org

The idea of a Living School was the result of a most serendipitous opportunity that arose for me via a holiday to Bali—the island of the gods. Friends invited my wife and me to stay in their amazing bamboo house, and they arranged for us to visit Green School—voted the greenest school on the planet. In so doing, I met with the mercurial and insatiably creative founder, John A. Hardy. His passion for sustainability, for design and the need to 'escape the mono-culture,' were captivating. So, as my career in Australia was driving me toward the more traditional pathways, I took a path less well trod. I careered off and accepted the role as Director of Green School, Bali. I was the ninth director in six years. Turbulence was assured, especially as on the eve of my departure to attend the school's first AGM, the chairperson informed me he had resigned. I had just thrown caution to the wind; I was jetting off to a foreign island, with my family in tow, and the chairperson had phoned on the evening before to tell me he was no longer there. I had jettisoned into a situation that was chaotic, emotional, and energetically focused on generating a new green outlook on learning and life.

My tenure at Green School was fantastic and fraught. It taught me to reflect deeply on my leadership, on the purpose of schooling and the emotional needs of a pluralistic community. Here was a collective of people from over 32 nationalities embracing a new paradigm. It was an incredible tribe, with rich diversity, intellect, passion and global awareness. Green School thrived on a dream to be different and to make a difference. It had international teachers, a vision that dared to expand to the size of John Hardy's imagination, and a foundation based on the beautiful and devout culture of the Balinese.

Green School was at once an attraction and a distraction. People longed to visit the school. Visitors toured Green School every afternoon. For some, this celebrated the quality of what Green School defined as sustainable; for others the constant interruptions meant the school was more like a zoo with the children photographed and viewed as oddities. Some felt this was a school more for parents searching for something. Green School drew people from all over the world, especially those who were rich, famous and powerful. While I was there, we entertained ambassadors, celebrities, campaigners, intellectuals and entrepreneurs; we even had the United Nations sign a Memorandum of Understanding after a visit by the Secretary General, Ban Ki Moon!

However, there were other challenges. The creation of this new school evolved a curriculum that drifted like a boat without an anchor. Drifting in a boat can be idyllic and tranquil, but there comes a time when currents take you into uncharted waters and storms loom on the horizon. To me, and my pragmatic approach to school management, this was an issue.

I learned a valuable lesson: starting a school needs careful planning, clarity around curriculum, definition of governance, training of teachers to support a new pedagogy, communication to ensure all are heard while maintaining policies and procedures. The opportunity to define these elements is prior to commencement. Starting a brand-new school is a critical time for purposeful planning.

Green School taught me the importance of dreams. Green School allowed me the exposure to an enlightened learning based on natural rhythms and needs. Green School developed in me the confidence to be an educational entrepreneur and to lead a new

progressive schooling system. Those dreams have evolved into the development of a progressive new school called Living School. It will be launched in 2020 in Lismore, a town in the south-eastern Australian state of New South Wales.

While I was busy adding details to my dream and taking practical steps to make Living School (Lismore) a reality, I had not yet heard about O'Brien and Howard's work on Living Schools. I wasn't even aware there were other Living Schools! Here we are, on the other side of the world setting plans in motion for Living School and it's heartening to see how our vision for a Living School coincides with so many attributes and practices outlined by Howard and O'Brien (2018). The following section lays out the current design for Living School (Lismore) using the framework of the Living School Attributes and Practices (Howard & O'Brien, 2018), specifically Values and Vision, Leadership, and Teaching and Learning.

This chapter explores the rich fabric of a new progressive school. It weaves through ideas not yet implemented as we progress through the hurdles and restrictions of regulations. This chapter's intention is to share concepts, processes and skills willingly for others to consider. If it ignites new ideas, then it has sown seeds for recovery: Living Schools are progressive and future-focused. In a time of standardised traditional models of schooling, this chapter hopes to engage new visions and share the vitality of diversity. (For the remainder of this chapter reference to Living School, rather than Living Schools, refers to Living School in Lismore).

Values and Vision: A Committed School Community

The Living School vision is about the power of inspiring places where children learn, teaching is untethered, parents connect, and a community thrives. Living School has a focus on a living philosophy. This is defined as Living Learning, Living Food, Living Architecture and Living Well. We see a similar vision in the words of O'Brien and Howard (2016).

> Living schools are predicated on a deep sense of meaningful contact with others and the larger living world that fundamentally carries our lives forward. In advocating a sense of reverence for life, education in a Living School offers a transformative mode of thinking that cultivates compassion. The curriculum of the Living School is one founded on understanding the vitality of one's place within the larger living landscape as being inextricable from human well-being. (p. 123)

Living Learning

Living School is a model of progressive education focused on growth. Living School is not 'owned' by anyone. There is no doctrine because that would risk indoctrination. There is no ideology because that can box us into a founder's philosophy. If we are to be truly living, we must offer opportunity for change. Living School must include the opportunity to be amended to ensure it can evolve. Whereas there are clear frameworks, all of our ideas are open to refinement as our community grows.

Living Learning requires teacher training. Professional learning plays a key role in the successful implementation of our teaching frames and unique learning lenses. All our documentation, all our curriculum, all our lessons—everything that is not bound by privacy legislation —will be opensource. We want to ensure that what we do can be replicated or used in other communities.

Living Learning has a unique focus on creating a curriculum that grows with the needs of a community. Every year we plan to have a Festival of Thought: where interested supporters of progressive education come together to learn, adapt and grow the Living School curriculum.

Living Food

Good nutrition is vital for developing brains and health. Organic gardens are a feature, whereby children grow, harvest and prepare food—from paddock to plate. Living Food is a means for establishing good eating habits and we will share meals together. This sits with the original meaning of companion: to break bread. One day a week we will strive to provide food for those in need from our local community free of charge, using our home-grown produce and donations from our community. This is part of our social service.

Living School increases awareness at an age-appropriate level. As students mature, so does their abstract reasoning. Living School promotes information about all food sources – informing learners of location, transportation, manufacture and nutritional elements. This information allows the learner to make informed decisions. For the older students, we will provide access to a kitchen, so they can prepare their own food.

Living Well

At the heart of Living School is a focus on ethical leadership with an emphasis on philosophy, design, eco-awareness, service, and Indigenous culture. Living School reaffirms the vitality and positive influence of a 'tribe', celebrating our connection with nature and with each other's personal uniqueness. Celebrating our diversity allows us to respect our individuality. Consciously respecting the diversity of our environment means we take seriously our responsibility to be custodians.

Global issues (ecological catastrophes, problems facing sustainable development, cultural inequalities, obesity) necessitate that we introduce, in an urgent way, the emphasis on a more responsible way of living, where we tread lightly on the planet. There is considerable overlap here with the attributes and practices advocated by Howard and O'Brien (2018): engaging with the world; demonstrating and modelling care for plants, other animals, and the rest of the natural world; developing a cultural awareness of others' world views and identities.

Our aim is to prepare children for the essential aspects of life: to feel truthfully self-confident, to know how to affirm oneself, to care for others deeply, to share the planet as a custodian, and to maintain positive relationships. Naturally, this impacts our curriculum and teaching pedagogy.

Living Architecture

Living School epitomises respect for the living world, celebrating the vitality of diversity and the importance of living in harmony with nature. To this end, a focus is on living architecture and low impact building, using sustainable materials to strive for a neutral footprint with regard to carbon and waste.

Living architecture allows students to design and build their own learning spaces! The traditional model of classrooms made of brick and mortar creates authority over the learner. We believe students can create their own learning pods, cubbies, open spaces, which engenders a sense of ownership and belonging. Learning spaces shaped like lattices, woven like enormous baskets, use indigenous lore; learning spaces can be temporary, using hay bale walls, or utilise tipis and forms of nomadic spaces that are sustainable and low impact.

For a small start-up project, we have taken an ugly brick and concrete building to repurpose and promote sustainable green building options, the first of its kind in this regional city (see Figure 1; Figure 2 portrays our plans for the building).

Figure 1
Living School original building in Lismore, NSW

Figure 2
Living School start up project in Lismore, NSW

Values, Attitudes, Skills and Learning (VAST)

Traditional schooling in many countries is outcome based. An emphasis on teaching values, attitudes and skills has long been my passion, and led me to develop a new framework, called VAST (see Figure 3). This new framework emphasises explicitly the character traits of successful, content contributors to communities. VAST stands for Values, Attitudes, Skills and Teachings.

The graphic of a flower is purposeful. It represents that the aim is to allow every learner to blossom. It does not matter when you bloom. Too often in schools there is a focus on age-cage races: "you are falling behind" or "catch up". Our goal is to emphasise a school's success is in its development of kind people striving to do good.

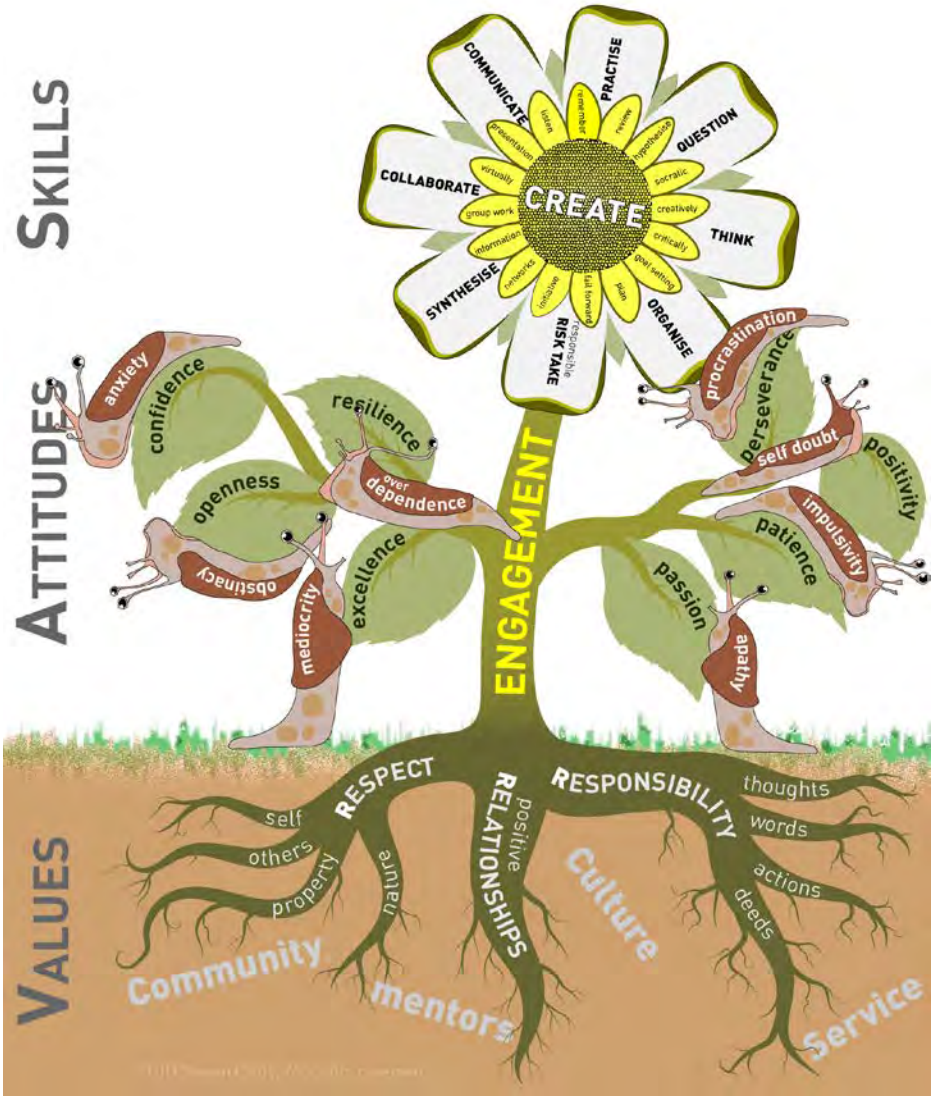
Values

The VAST model defines three key values, what we call the new 3Rs (Respect, Responsibility and Relationships):

Respect

- Respect for yourself
- Respect for others
- Respect for property and ownership
- Respect for the environment

Figure 3
VAST framework, JD Stewart 2018.



Responsibility

- Responsibility for your thoughts
- Responsibility for your words
- Responsibility for your actions
- Responsibility for your deeds—deeds are defined differently to actions: deeds are intentional actions that help or make a positive impact on others or the environment.

Relationships that are positive. Positive productive relationships are not merely 'friendships'. Positive relationships challenge us, stretch us, assert views that are not aligned with our own, and are nurtured via integrity, trust, and respect.

At Living School, self-actualisation is at the root of the pedagogy in and outside the classroom. While our purpose as educators is to provide opportunity to each child to develop his or her talents and capacity to learn, Living School also has a healthy emphasis on the collective. This means that we will reinforce a perspective of asking how 'we' are doing, rather than just focusing on 'me'. How often do we hear statements affirming an individualised outlook on achievement? What mark did I get? How well did I do? What do I need? Flip this to be a collective focus and we start to empower collaboration and community: How well did 'we' do? How can we improve 'our' achievement? What do 'we' need to do together?

Attitudes

The VAST model identifies eight key attitudes for success, which are illustrated as the leaves of a growing plant:

Confidence—if we develop confidence, we grow a compelling desire in learners to try new things, which underpins initiative. Confidence allows us to bounce on and face mistakes because we see mistakes as vital: the key to failing forward.

Openness—learning about being open to new ideas, open to accepting when we are wrong, and open to change is a key attitude for learning. Openness drives curiosity, and vice versa.

Resilience—resilience is really all about being flexible. Learners who are flexible handle stressful situations better, get over things and move on quickly, which establishes a growth mindset.

Excellence—excellence is an explicit understanding of the effort required to give of one's best. It is acceptance of high expectations in order to attain a personal best. Excellence is often an intrinsic desire to strive for success.

Passion—passion is ambition materialised into action. It is more than enthusiasm and excitement. It requires commitment, energy and effort. Therefore, our Living School teachers will purposefully design experiences and opportunities to capture a learner's interest and encourage their passion.

Patience—patience is slow-learning, which is calming things to think more deeply. Reflection takes longer than impulse, so to properly process information means we need to give time for learning. Patience is also mindfulness, the ability to control oneself deliberately.

Positivity—we shape our world with our thoughts. Teaching positive thinking promotes a positive life. We believe that in positive schools it is important to provide space for gratitude and to offer opportunities for service as leadership.

Perseverance—tenacity and determination have long been held as great human virtues. Perseverance allows us to learn through failure, to see blocks as stepping stones. We can teach explicitly via challenge-based learning how to persevere, so we learn to fail forward.

Skills

Looking at Figure 3, it is evident the values are the roots, engagement is the stem and positive attitudes the leaves. However, there are a set of skills that allow us to blossom, represented in the petals. Skills are different to attitudes in that they become habits by intentional rehearsal. The skills Living School emphasises are: Responsible Risk-taking, Organising, Questioning, Thinking Skills, Purposeful Practising, Communicating (verbally, expressively, visually, and non-verbally, as well as adopting active listening), Collaborating, and Synthesizing.

Creating is at the core of the flower. Creating is at the heart of innovation. Creating emphasises the creative arts, which falls under our focus on XQ—the expressive quotient (See Figure 6 for further explanation of XQ).

Each of the attitudes described above leads to success but we also recognise and will explicitly teach learners there are attitudes that eat away at or erode our positive mindsets These negative attitudes are blockers, and in the VAST framework are illustrated as slugs.

Living School and Living School Attributes and Practices

There is considerable overlap with the attributes advocated by Howard and O'Brien (2018): engaging with the world; demonstrating and modelling care for plants, other animals, and the rest of the natural world; developing a cultural awareness of other's world views and identities.

Values and Vision

Developing an Expanding Cultural Awareness of Others' World Views and Identities and Respecting Indigenous World Views and Traditional Ways of Knowing.

Australia is home to a rich heritage unlike anything anywhere else in the world. Australia's first peoples have had a consistent culture connected to country for over 50-60,000 years.

In Living School, we will celebrate our first peoples and respect their culture by ensuring all public meetings have an acknowledgement of country (a formal statement recognising the

traditional Elders past, present and future and their custodianship of the land on which we learn together). Where possible we will use dual language, and include technology to connect the actual traditional spoken language on all signs by using HP Reveal (formerly Aurasma). We will offer a scholarship program for Indigenous students. Living School will teach Indigenous culture in practical hands-on experiences, such as excursions to sacred places with Elders, architecture, weaving, lore, a medicinal garden, communal gatherings, songlines for learning, Elders' council, links with local land councils, and environmental programs based around United Nations international days (see Figure 7). There will also be employment opportunities for Indigenous rangers to manage the land and our endangered species breeding/propagation program, which aligns with Howard and O'Brien's (2018) framework attribute: Demonstrating and modelling care for plants, other animals, and the rest of natural world.

Developing a Compassion for Oneself, Other People and All Living Things As Well As the Skills to Address Positive Change.

If the purpose of school is to connect with community, there needs to be a change in how we perceive the physical grounds of 'school'. Technology now allows us to mark attendance and communicate off site. Excursions and use of community space for learning is available. The issue schools face is the reduction in excursions, owing to paperwork and the perception by some that it takes away from test-preparation/textbook delivery rigour. Living School will use excursions to explore the local environment to educate our students in geography, culture, community and ecology. We will offer lessons in restaurants that are unoccupied during the day, providing a small fee to the restaurant owner. We can offer lessons and activities on the beach, in the rainforest, on farmland and in the city-scape. We intend to form relationships with the local library, and in so doing, allow our students to connect with these public resources. Such usage empowers learners to connect with their community and form lasting relationships of understanding and support. It also means we will not spend large sums on capital works inside the perimeter of the school ground.

Dickie (2018) writes in the *National Indigenous Times*: "Education is not just about teaching children in the classroom, it's about engaging with families, Elders and the community as whole, and allowing them to have a say in their children's education. When the family is engaged, so are the children."

There is a great opportunity to promote edu-tourism. Offering international families the opportunity to attend Living School for 'experiences', such as a six-week program (see Figure 8), would allow our community to thrive via the pollination of global and cultural perspectives. Currently in Australia there are substantial fees for international families to attend public schools.

A Solution-focused Growth Mindset When Facing Challenges and Opportunities

Emphasizing the importance of repurposing and our responsibility to be custodians of the environment can develop a growth mindset. Living School intentionally emphasises the

importance of creatively addressing real world challenges as part of each day (see Figure 9). The VAST model described above (Figure 3) outlines the skills that students learn to address positive change. Living School establishes connections between generations, between learners, between teachers, between parents and between us and our natural world. It also reinforces nature and place-based learning.

Leadership: Organisational and Governance Structures

All schools work within legal constraints. In Australia, to operate as a 'school', there is a process of registration and accreditation governed by NESA. NESA is the State-based Education Standards Authority. The AIS (Association of Independent Schools) is an affiliation of non-government schools. The AIS interpret NESA policies and support independent schools to ensure each school operates legally and responsibly. Having a good governance model with clear policies ensures there is consistency and transparency. Living School is a not-for-profit corporation. As such, it has a constitution and a board of directors with nine members. The Board of Living School has targets for elected members to ensure diversity: 40% female, 40% male, 20% cultural diversity and/or Indigenous. The Head of School and the Business Manager will also sit on the board and report to the board.

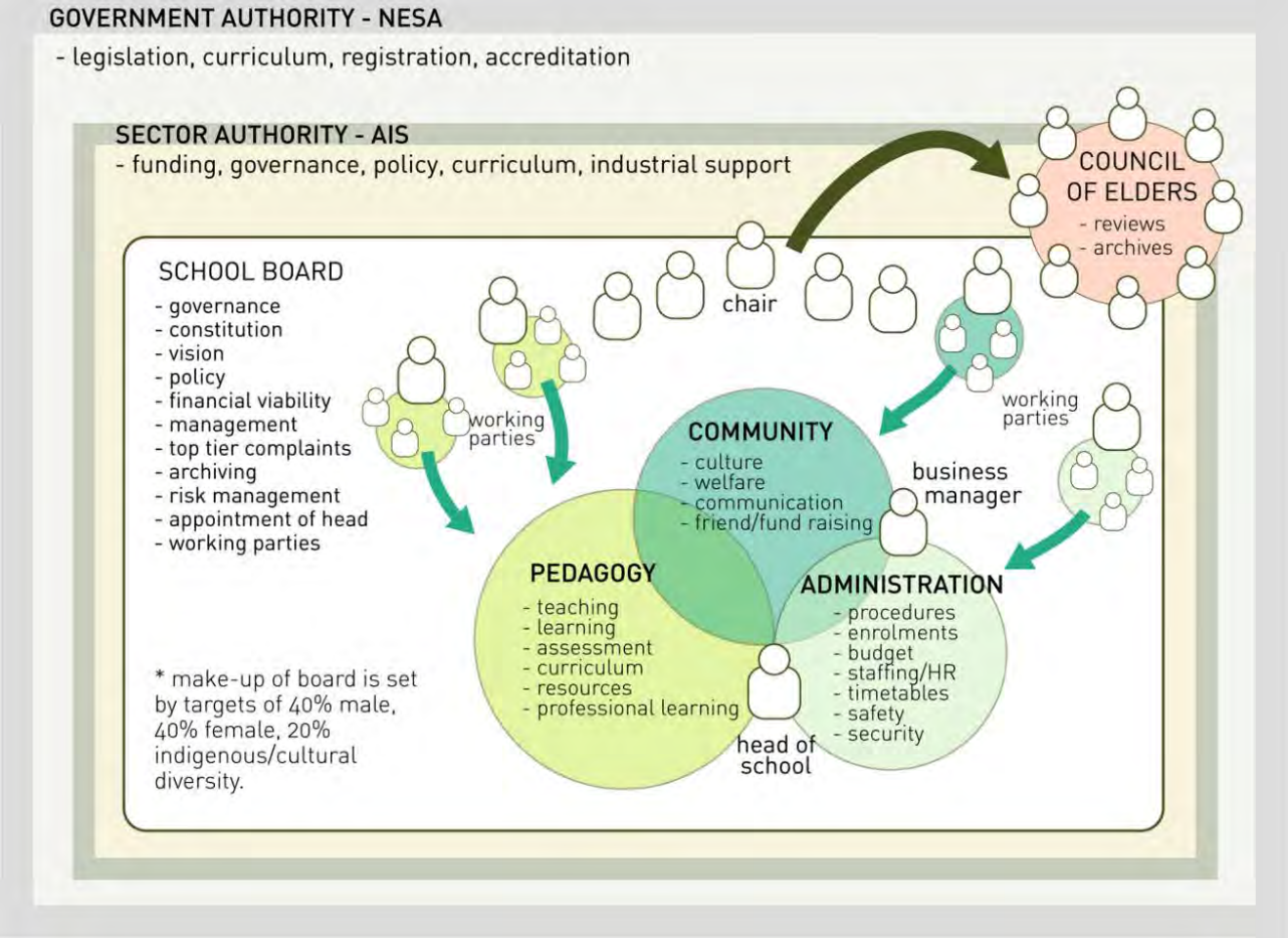
Adopting sociocracy 'circle' structures is a way of structuring organisations collaboratively so decisions are based around consent and transparency.

To avoid over-commitment and ensure organisational management, under the board are a limited number of active working parties, assigned by the board. Each working party must be chaired by at least one board member, who is able to manage an autonomous sub-circle based on an identified strategic area of growth. These working parties lie between the day-to-day management of Living School and the policy governance of the board. The working parties' reason for being is to support harmonious evolution, transparency and collaborative consent.

There are three defined areas of function:

1. Community—for example, culture, welfare, support groups, networks and opportunities.
2. Administration —for example, staffing, enrolments, communication, procedures.
3. Pedagogy—for example, curriculum, learning, teaching, assessment, resources.

Figure 4
Living School Governance Structure



Council of Elders[1]

Every board member will have a tenure of three years with the opportunity to extend for a second term of three years. When a board member leaves the Living School Board, the member is approved by the board to sit on a Council of Elders. This council has the responsibility to retain the cultural history of the school: the council ensures they are the knowledge-owners of all policies archived and current.

[1] The Living School board Council of Elders includes retired board members and though the name is similar to the Elder's Council previously mentioned, the Elder's Council is composed of indigenous Elders. Our intention is to respectfully model the recognition of the experience and wisdom of our school board elders.

Our aim is to have a collaborative relationship with teachers, staff, students, parents, and the wider community to co-create Living School continuously. For instance, we envision that any new policy must be published to the community prior to any determination by the board. This ensures there is transparency and the opportunity for all members of the community to have agency.

Student Agency

A key feature of Living School is the student's voice. Students will be welcome to attend relevant staff meetings, similar to a public forum at a local council meeting. The weekly timetable also incorporates a feedback loop. This is a period when the teachers and administration representatives attend a designated lesson, to receive feedback from students on the week: what was engaging, what was irrelevant, what they would like considered, and so on. Adopting this model of democratic schooling empowers learners to feel a sense of belonging.

Teachers and students will be encouraged to take risks with learning, and the school year is designed to incorporate professional development for teachers. The six-week block program (see Figure 8) opens the opportunity for teachers anywhere in the world to come and attend Living School to teach and learn, so we can offer the world's best practice and in so doing establish greater global connectedness and professional development.

Teaching and Learning: Pedagogical Practices and Influences

Living School KeyStone Themes

Living School strives to ensure all our learners graduate understanding the big topics, which we call KeyStone themes:

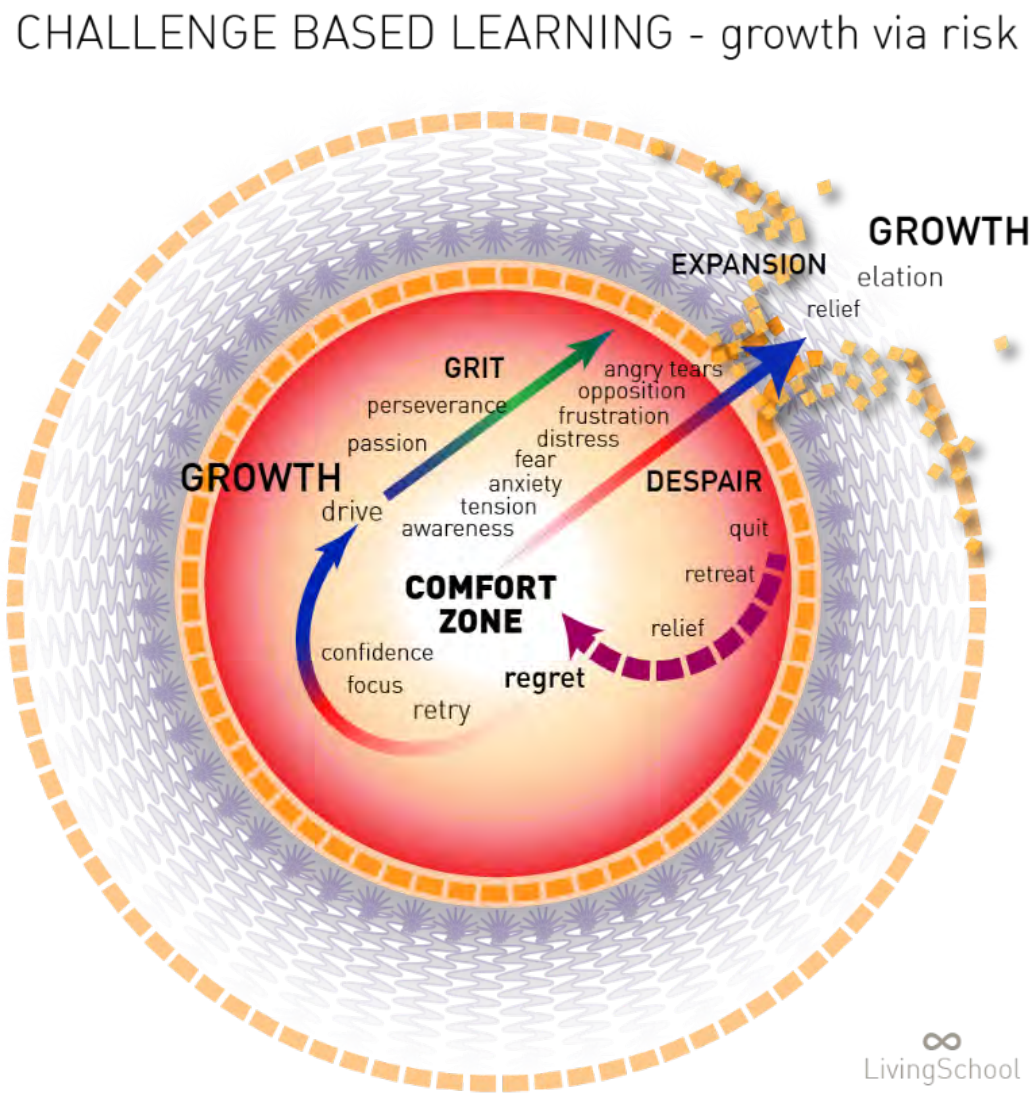
1. Nature
2. Life and Living
3. Identity
4. Phenomena
5. Civilisation

Each of the KeyStone themes has sub-level headings. Each sub-level is broken into smaller facets, mapped purposefully to meet the developmental stage of a learner's understanding. Each of these themes will be unpacked and linked throughout our learning experiences. These themes are specifically targeted every day.

Living School is based around two semesters of six terms. The first week of every semester is an orientation. The last week of every semester is a revision week. The orientation and review weeks emphasize assessment but have a much broader scope. These weeks are called The Challenge. Challenge-based learning plays a major role in Living School as we grow

to understand our boundaries by stretching beyond walls and striving to push beyond our comfort zone (see Figure 5).

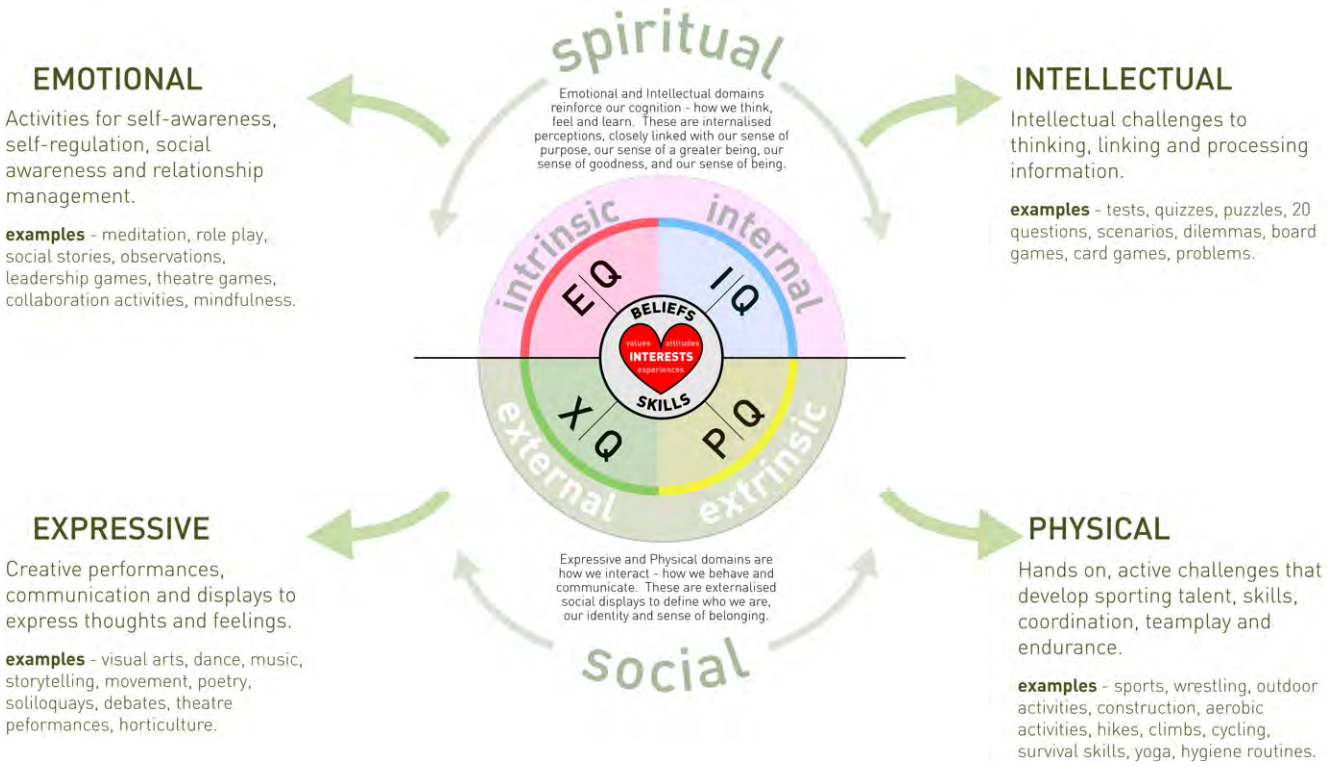
Figure 5
Challenge-based Learning



The Challenge emphasizes growth through activities planned to build capacity in Emotional, Intellectual, Physical and Expressive learning domains (EQ, IQ, PQ and XQ). These domains are explicitly recognised in our Holo lens model. The Holo lens allows us to plan purposefully to engage our internal/intrinsic self (referenced to our spirituality) and our external/extrinsic needs (referenced as our social self). For instance, EQ and IQ are how we internalise our thinking and our feelings; PQ and XQ are how we choose to display or

interact/express ourselves in our external environment. Good teaching incorporates all four of these learning domains and builds on each learner's and each teacher's interests, beliefs and skills.

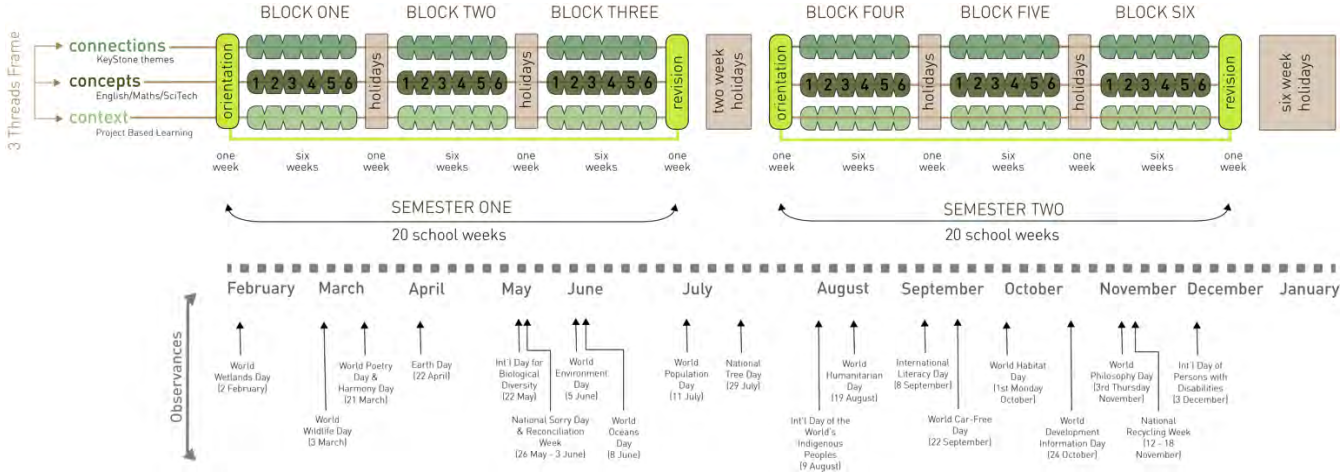
Figure 6
Holo Lens



Living School promotes learning as life-long and much more than testable recall. The Challenge engages and stretches comfort zones individually and in team-based activities to build capacity, with reference to the VAST learning framework (Figure 3) to explicitly develop the 21st Century skill sets.

Each term consists of six-week blocks of learning (see Figure 7). There is a week break planned between each term. Key professional development days engage and support teachers for one day each of the one-week holiday breaks, addressing strategic intentions by reflecting on the term's practice. Having designated professional development days during the term break develops the collective efficacy of all our teachers free from disruption. Such a focus on developing the teacher's craft raises the expectation and celebration of the art of teaching. Our focus is not so much on what teachers do, but how they do it. During these professional development days, teachers will come together to review, to evaluate and to plan for the following term's learning experiences. This is a professional expectation and models life-long learning with our teachers developing alongside the Living School programs.

Figure 7
Living School Academic Year



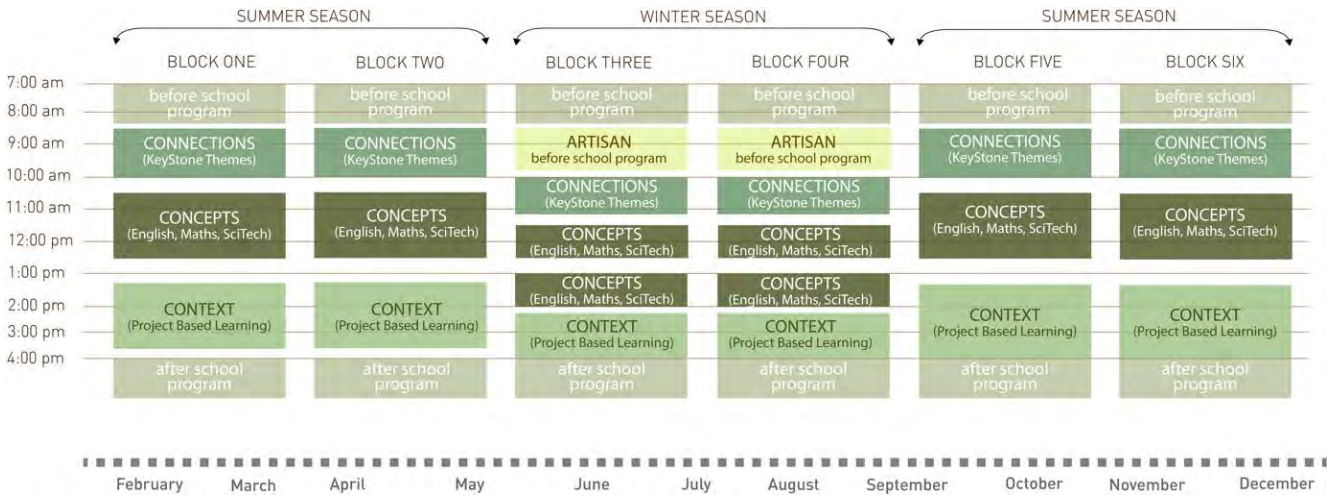
Living School adopts rituals and ceremonies based on international and national days of observance. These days are placed within the yearly calendar and form a basis for celebration in keeping with the Living School vision and draw attention to a global outlook.

Living School will support the community by offering before-school and after-school programs. During the holiday periods, Living School will run courses and adventures for anyone in the community to attend. These are part of our vacation care program. The six-week block over the December/January period will be open to international visitors—students and teachers—to explore and experience the Living School philosophy and a snapshot of the program.

A key consideration is start times for the learning day. We know middle school students have a different circadian rhythm. We also know that there are shorter days in winter months—and it is lighter later in the morning. Living School manipulates the timetable to suit these variations. In the winter months (in Australia this is June to September) we can have school start later, giving students and families more time in the morning. In summer months, school days start earlier and can finish later as there is the opportunity for more daylight hours. Therefore, the Living School calendar will be flexible and agile to meet the learning needs of students, as well as the teaching needs of teachers.

Attention is placed on providing time for unstructured play. Each day has time set aside for breaks whereby students will socialise and interact physically and expressively.

Figure 8
Living School Academic Timetable



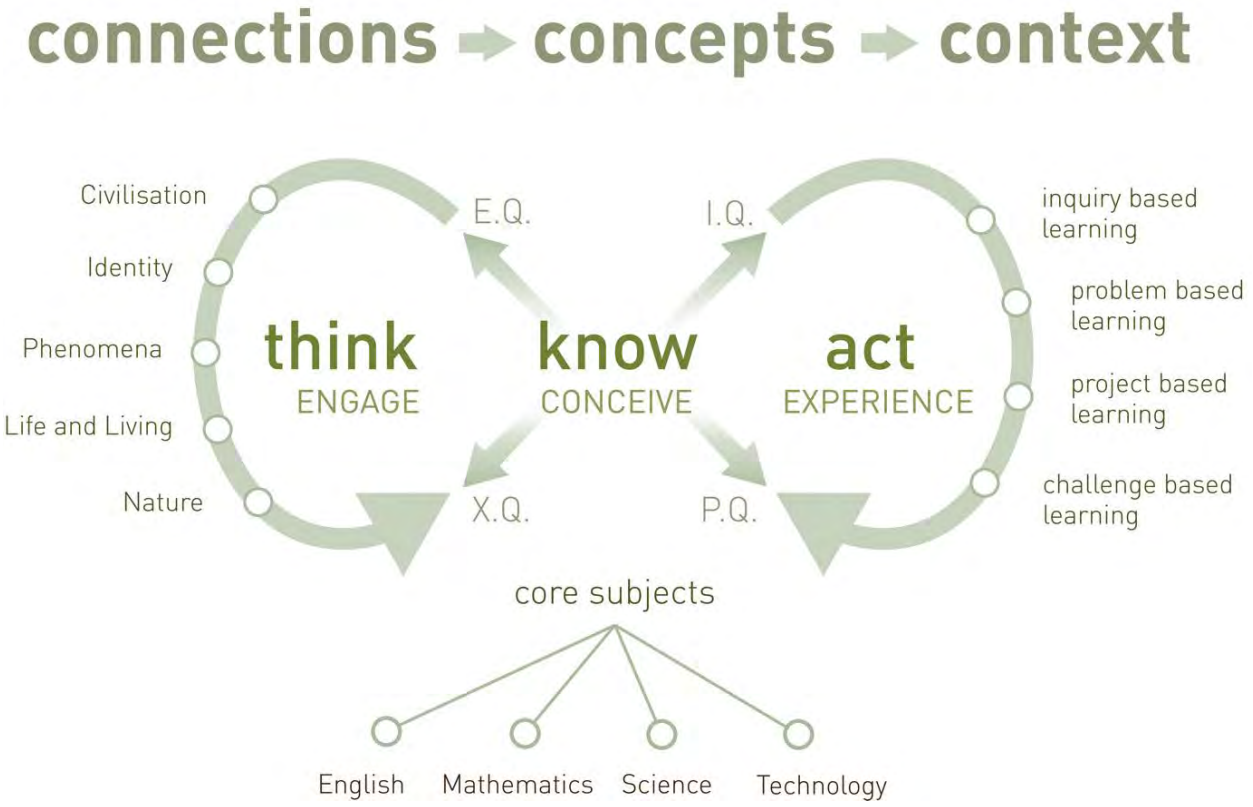
The School Learning Day – Tangible Teaching

Living School is a progressive school, looking to support excellence in learning and teaching. We believe learning is akin to weaving, where we have enough tension to hold patterns but enough variations in scope to offer diversity.

To this end, we adopt a system called the 3 Threads Frame (Figure 9). The first thread focuses on engaging learners by integrating subjects to address our five KeyStone themes (what we call the Connections frame) in a large block of time. The second part of the day is our Concepts thread, where the specific subject concepts in English, Mathematics, Science and Technology are targeted to develop mastery. The third thread is the Context frame, where we develop decisively hands-on activities on and off site to contextualize learning.

The Concept thread opens our teaching to a new progressive model of mastery, personalised to address the cognitive maturity of the learner, using agility groupings. In short, the teachers collaborate to define the key concepts that are to be addressed over a six-week block. Three examples of the concept are then framed together as the teachers develop an assessment task. An additional extension paper offers additional challenge to students proficient at the concepts being taught. The teachers define what level of mastery: that is, the concepts that must be known, which we refer to as mastery cognition.

Figure 9
The 3 Threads learning frame



The Context thread allows for experiential project-based learning. There is an intentional progression: we instigate the year with an inquiry-based model. This orientates and refines the skill set required for project-based learning: questioning, collaborating, planning, testing, refining, evaluating and reporting. The second phase is problem-based learning, whereby there remains a scaffold that is group-oriented and frames how learning can evolve and address an identified issue. The third phase is project-based learning whereby the scaffold is peeled back to only three scenarios: a social good, to address an environmental cause, or an entrepreneurial emphasis on developing a sustainable business concept.

In addition, the context thread also allows for the students to choose electives and to grow a portfolio of experiences around challenges, such as gaining a pilot's licence, becoming a barista, gaining a diving instructor's certificate or other certification that can be an asset for future employment beyond an examination result. Living School expands the potential for students to feel mentored and supported to develop an interest into a passion for life.

Conclusion

Living School dreams to be different, to reimagine schooling to better suit a progressive model of education. In so doing, it retains a connection with the past—when living was tied more closely to a natural environment and an appreciation of our custodianship. Living School believes that interest-based learning can be implemented successfully to promote a connected community—a co-learning ecosystem. We believe schooling must offer diversity and must be engaging.

Living School is developed intentionally to be progressive by:

- realigning school to be connected with community,
- addressing the KeyStone themes of Nature, Life and Living, Civilisation, Identity and Phenomena to integrate content knowledge for broader understanding,
- ensuring there is academic emphasis of conceptual understanding in English, Maths, Science, and Technology,
- offering experiential learning via project-based and challenge-based pedagogies, and by teaching with purpose around lenses and frameworks that elaborate and amplify learning and teaching intentions.

Living School in Australia addresses issues that are not just tied to a nation, but to a global appreciation of the need for change to improve how we educate our children for the future.

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Chapter 5

Sigurbjorg Stefansson Early School: Learning Naturally

ROSANNA CUTHBERT

Wonder Wagons, vibrant red wooden slats with strong durable wheels, were joyfully tugged, pushed, and pulled alongside the trickle of energetic grade one and two children. There was something very different about this excursion. These wagons were stuffed with notebooks, clipboards, pens, pencils, field guides, books, binoculars, magnifying glasses, iPads, among other essential items such as bandages and snacks. It was pelting rain, but the outdoor adventure was not postponed; the rain was expected and greeted with rain gear, smiling faces, and exuberance. The classes had been preparing for this day and were eagerly anticipating learning outside with their peers, exploring their wonders and the unexpected gifts that would be bestowed upon them by nature. Layers of colourful, shiny raincoats, floppy rubber boots, and of course umbrellas, shone through the steady lens of rain as I watched them clumsily amble along, gradually disappearing into the yellow field.

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

(see http://creativecommons.org/licenses/)

C. O'Brien & P. Howard (Eds.). (2020). *Living schools: Transforming education* (pp. 67-78). Winnipeg, MB: ESWB Press. ISBN 978-0-9939534-2-2. Retrievable from www.ESWB-Press.org

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.

These outdoor adventures, which vary from one hour to half-day events, provide a rich, authentic, and thought-provoking learning environment, designed initially not only to achieve Science learning outcomes such as changing habitats and animal adaptations but also for students to discover the interconnectedness of living things. Students are able to gain specific knowledge about plants, animals, habitats, bugs, birds, critters and lifecycles, as well as to have opportunities to develop contemporary learning competencies such as critical thinking, collaboration, communication, creativity, character, and citizenship. These learning experiences foster an authentic urgency for students to reference plants and critters they discover in their Manitoba field guides, to search for important information on their iPads, and/or to seek out books to read for information in a quest to find out more about their wonders and discoveries. Students are reading, writing, gaining knowledge, researching, exploring, discussing, and listening: important building blocks and skills that they need to acquire, enhanced by the other benefits of being outdoors, connected to nature, and more physically active. On a recent visit, a grade one student, who had been an emerging reader in previous months, was voraciously reading a book on fossils which she had perched strategically at the end of the Wonder Wagon so that she could continue reading while pushing the learning cargo to their magical forest destination. Tucked alongside the wooden slats, visible to all, was a handwritten collection of nature words with the Indigenous words alongside, in Swampy Cree (*Ininimowin*). These words had been generated with the students by a university student from the community who was embracing social justice initiatives and infusing his own Indigenous roots into his youth and philanthropy journey. As we approached the beginning of the path to enter the proclaimed "magical forest" where the students had erected a hand-made teepee, several of the children identified some of the natural features, employing the Swampy Cree words they

had recently learned, such as *mistik*, which was a beautiful tree at the entrance of the path. On an outdoor visit the previous year, after reluctantly packing up their clipboards and materials and assembling them in the Wonder Wagons to begin their slow trot back to school, several children in the entourage suddenly paused to blow kisses into the air, passionately declaring that they were sending their love to nature.

My vision as a new principal was to create a learning community where we are all learners and discoverers together, regardless of age or grade, and where we all learn with and from each other. Malaguzzi (in Edwards, Gandini & Forman, 1998) stated that the school "environment should act as a kind of aquarium which reflects the ideas, ethics, attitudes and cultures of the people who live in it" (p. 177). As an educational leader, I wanted to ensure that we invested our time and energy as a joyful learning community to consider possibilities and hope, to exist in a space that cares for every unique individual, to be engaged in tasks that mattered, while also positively impacting the world in which we live. Education for Sustainability has been an overarching focus in our school and was the catalyst for making this dream happen. Re-connecting students to nature and having them interact with other living things has helped students to realize that they can develop agency and positively impact the world through their compassion and actions. This environmental lens also provides an opportunity for the seamless infusion of human health and well-being, Indigenous perspectives, social justice, diversity, and inclusion into our daily learning culture.

Transitioning into my leadership role from being a teacher and assistant principal in the same school caused me to pause and reflect deeply on my own vision as an educational leader. I invited my staff to join me on what I referred to as a "messy path", one we could navigate through together based on what we felt truly mattered in education, on how we truly believed students learn and flourish. We acknowledged that as educators, we tend to measure that which is easily measurable. As a result, contemporary learning competencies such as critical thinking, creativity, citizenship, communication, and collaboration are often neglected or overlooked, even though many educators feel that these competencies are becoming even more essential in our constantly evolving and technologically advancing global society. One of the challenges facing teachers and administrators who value this paradigm shift away from an over reliance on traditional models of education is the difficulty in quantifying, assessing, and measuring these competencies, due to the complexities inherent in these cross curricular and multi-dimensional outcomes.

I began to envision a school that considered children as strong, capable, resourceful, and intelligent beings with unique gifts and strengths that require nurturing, not stifling, based on some of the foundational principles of the Reggio Emilia philosophy. I reflected on tendencies in education to make assumptions about children, to sort students, and to view them only from a deficit perspective. We began asking our students how they wanted to make the world a better place right now, despite their young age, rather than simply preparing them for the next grade and for their future. Our professional dialogue and reflections included the stance that in addition to preparing students for their future, we as educators also needed to be ready for our students to ensure that they are able to achieve academic and social emotional success. As a staff, we started to reflect on some of the constraints and rules we had in place that, upon

deeper consideration, were not purposeful and did not encourage students to think responsibly, critically, or independently. I felt energized and rejuvenated, and the feedback that I received from many staff members mirrored these sentiments. Malaguzzi's (1998) metaphor of a school as a "living organism … schools as interconnected living systems that require sustenance, nurturing, room to move, grow, and house the pulse of life, instead of as institutions for the production of knowledge based in bureaucratic processes of regulation" (in Wien, 2008, p. 7) was an image that accurately depicted my vision as a principal.

A Glimpse into Cross Curricular Teaching and Learning/Inquiry Inspired by Nature at Sigurbjorg Stefansson Early School

Slightly damp from the drizzle that greeted him during the outdoor recess break, a little boy in grade one gleefully announces, "Mrs. M., I made friends with the rain today!" as he bursts through the metal school doors amid the bustle and unharnessed energy of our JK-4 early years children and supervisors. Mrs. M., responsive to the child's delight, used this opportunity to capture the awe and excitement that reverberated within this multi-age classroom, designing a learning sequence that "uncovered" many learning outcomes from our Manitoba provincial curriculum, especially targeting English Language Arts, Science, and Social Studies. Sharing his joy with his classmates during their daily sharing circle, the class then embarked on a learning journey that targeted the states of matter (solids, liquids, and gases), seasons and changes, the water cycle, patterns in Math, poetry, art, and movement. After posting a class documentation of their learning on the school social media platform, I was so impressed by the deep level of understanding they conveyed that I sent them a message with two poignant quotes to celebrate and further provoke this experience: "Look deeply into nature, and then you will understand everything better." (Albert Einstein) "The Earth has Music for those who will listen." (Shakespeare)

These quotes inspired a spontaneous visit to the school's Music room, where the students explored instruments such as the xylophone, percussions, and piano to recreate the patterns of the rain. The students wrote about the rain, creating lyrics and poems to express their personal experiences. This new understanding emerged in their physical education class, where the Physical Education and Sustainability lead teacher, who had overheard this learning celebration in the staffroom, encouraged them to engage in interpretative, creative movement, and dancing to represent the water cycle. The students painted and created artistic interpretations of rain, utilizing a variety of materials including natural loose parts, clay, tin foil

and art paper. At one point, they spilled paint blobs onto their paper outside while it was raining and watched the raindrops manipulate the paint for their creation. One little boy's fascination with "making friends with the rain" and his teacher's response to it resulted in a powerful learning journey for not only this student, but also his classmates. Our music teacher and literacy coach incorporated explorations into her music class and then designed a musical literacy program where students, after reading beautifully illustrated children's literature, composed music, wrote lyrics, and collaborated with others to perform their creations.

Teachers began to embrace this multidisciplinary approach and passionate testimonials permeated through the hallways and classrooms of our highly collaborative school. It felt as though everyone wanted to be immersed in this feeling of wonder and fulfillment—a sense that our teaching and learning was not only relevant, purposeful, and engaging, but was enhancing the quality of our lives, helping us to become more deeply connected with ourselves, each other, and our environment. We started to ask questions of ourselves, not just our students, and began reflecting and rethinking our current routines and practices. It began to be commonplace for a teacher to stop me in the hallway or pop in to my office and pose questions such as, "Do you think I could … I was wondering about …What if …?" and this dialogue slowly trickled through the classrooms, transforming our way of thinking, knowing, and doing. I became personally and professionally overcome with a sense of joy and efficacy. Teachers discovered that in addition to acquiring very detailed factual knowledge about their wonders and those of their peers, there seemed to be no limit to what each child could achieve, especially when teachers presented some of the new learning concepts from a stance of wonder and curiosity. This was transformational to the practice in our school. Teachers were no longer constrained by the limits of exclusively employing direct instruction throughout the day and by the subsequent mounds of often irrelevant paperwork and marking. This shift in the classroom setting enabled teachers to gather additional evidence of learning through observations and conversations with students so that students could be supported and challenged throughout the day, in addition to paper and pencil tasks. Teachers also discovered that designing learning in such a way that creates opportunities for the development of contemporary learning competencies helped them to target outcomes in the provincial curriculum but also in other educational priorities areas such as well-being in an inclusive and empowering learning environment.

Our action research, propelled by this new insight ensued over the next seven years, and has been augmented by a compelling desire for professional learning that was formal and informal, intentional and self-directed. In addition to touring/collaborating with an urban school that was affiliated with a provincial university, we attended workshops, purchased a multitude of professional books and high-quality children's literature and visited each other's classrooms. We strived to create and explore deeper learning opportunities for students while maintaining many of the important traditional components, structures, and routines of school to ensure that students were exposed to diverse learning opportunities that are relevant and meaningful. Guided by curricular outcomes, provocations such as books, artefacts, or classroom discussions are designed to ignite curiosity and to encourage learning sequences where musical, environmental, digital and physical literacies are developed alongside the

foundational literacies. This culture has become entrenched in the daily life of our school, and it would be impossible for many of us to abandon these practices due to the insights gained and the success our students have achieved in all aspects of their academic and social emotional learning. We continue to welcome many educators from inside and outside of our province who are intrigued and inspired by our success with infusing inquiry, education for sustainability, and deeper learning into the provincial curriculum. These classroom observations and school visits create another opportunity for us to deepen our reflection, as we are often asked a multitude of questions which we may not have considered or explored from their perspective. As a principal, I frequently accept invitations to present on our school's celebrations of teaching and learning in neighbouring school divisions, at provincial conferences and universities because of the academic excellence and human flourishing that has been evident. I am honored to share our story with the hope that other students and educators can benefit from this inclusive, engaging, and joyful teaching and learning environment.

This new path was exhilarating. Everything felt new and fresh, yet we still had so many uncertainties and questions. Aligning our action research with some of the priorities already established by our Evergreen School Division education plan at the time, Education for Sustainability (Environment, Economy, and Well-Being), contemporary learning competencies, student engagement and inquiry-based learning helped to frame this research and guide our discovery process. Redefining knowledge and what it means to learn, and viewing it as a rhizome, rather than a tree with hierarchical steps to climb, shooting in "all directions, with no beginning, no ending, always in between" (Rinaldi, 2006, p. 8) eloquently described my own state of thinking. I marvelled at how many of our staff, including myself, were becoming submerged in this flood of engagement, of understanding, and joy of learning alongside of our students.

We have navigated through the challenges we have faced in this journey with an open mind to constructive criticism, which I believe has made us more resilient and our successes even more impactful. Our grade four students leave our school to attend grade five in a middle year's school, which is in a different building with a more traditional teaching environment and philosophy. This transition to another school has always been an ongoing challenge as we strive to provide the skills and competencies essential to ensure success in their future learning, regardless of the differences in teaching approaches or environment. Respectful and open dialogue and efforts to continuously enhance our transitions and communication with the school, the parents, and our community is imperative as we constantly strive to refine and improve our teaching practices. Generating school narratives that also promote the foundational skills in reading, writing, and mathematics has been essential to acknowledge that while our priorities do include other literacies (environmental, physical, musical), they help to strengthen rather than come at the expense of academic excellence. Sending a clear and consistent message that academic standards are not compromised and in fact are enhanced with our holistic approach has been at the forefront of our school's communication. Our school's Twitter feed references these important curricular connections while profiling inquiry-based and nature learning experiences to illuminate these pieces to parents and the community.

Other challenges that confront us in our outdoor excursions, particularly in locations that are far from the school, are, first, that there is no access to washroom facilities. Therefore, teachers usually limit these visits to one or two hours. Second, risks related to outdoor excursions such as bear sightings and ticks cause us to monitor and modify our plans according to the season and the related risks, choosing places in closer proximity to the school such as local parks. Our newly constructed natural playground is providing us with a beautiful, safe, and accessible space right outside of our school doors.

Increased Focus on the Arts and Explorations

We began to provide increased opportunities for students to become immersed in learning environments that not only celebrated the arts, but that also encouraged creative expression. I believe that exposure to the arts can not only enrich our lives and celebrate diversity; academically, it can be a conduit for student voice and for making thinking and learning more visible. We framed this focus based on the work of Sir Ken Robinson and the Reggio Emilia philosophy of one hundred languages of children, visible learning, and documentation. We significantly increased our arts budget and purchased high quality materials and tools such as paintbrushes, paint, and canvas frames, for students to have easy access within their classroom, and on a consistent basis. Children were encouraged to express their ideas and thinking in a multitude of different ways, including sculpture, paint, movement, songs, poetry, and design.

Several teachers, eager to incorporate deeper learning into their approach, scheduled an afternoon exploration block where students were able to delve into their interests or provocations set up by the teacher (or discoveries brought in by students). Students were able to build, construct, design, write, create and discover within this timeframe, independently or collaboratively, and at their own pace. This exploration block was instrumental in achieving a

paradigm shift, as teachers were able to experience first-hand the power of inquiry, and how sparking students' wonders and igniting curiosities led students to far exceed curricular expectations in a dynamic and vibrant learning environment. This resulted in a shift away from a sole focus on the product or mark, to one that also values the process of learning and exploring. It helped to develop a mindset that encouraged curiosity along with the acquisition of knowledge and determining the correct answer, one where the learning continues long after the school bell rings, and where what students need to know is no longer compartmentalized, fragmented or isolated from their life outside of the school. Teaching and learning at SSES suddenly became so much more meaningful.

Space That Teaches

Early in our journey, we began to wonder about how important the design, layout and organization of our classroom and school environments were in terms of being conducive to learning. A quote by Loris Malaguzzi (personal communication, 1984) resonated with me as we reflected on our own school space:

> We value space because of its power to organize and promote pleasant relationship among people of different ages, create a handsome environment, provide changes, promote choices and activity, and its potential for sparking all kinds of social, affective, and cognitive learning. All of this contributes to a sense of well-being and security in children. (Edwards, Gandini, & Forman, 1998, p.177)

We decluttered our classrooms and school, donating unused textbooks, resource books, furniture, and materials. Replacing our small, rectangular desks with circular tables, of various heights, some low to the floor, we created flexible seating so that students had choices as to where they could work independently and/or collaboratively. Learning materials and supplies, once housed in an exhaustive collection of plastic bins, were now displayed prominently in attractive wicker baskets made with natural fibres. Commercial bulletin board decorations and posters were dismantled, leaving an empty slate to document student learning and photos depicting more of the process of learning, in addition to final products. All supplies and learning materials are carefully selected and purchased by the teachers, so that every child has access to the same learning tools, furthering the notion that the classroom is a shared, collaborative, and equitable learning community. Students participate in the organization of the materials and the location of furniture such as couches, comfortable chairs, rugs, lamps, baskets, and other such items. Tree stumps and nature collections are scattered throughout the classrooms and school, an acknowledgement to our love and appreciation for nature. Our classrooms became diverse, welcoming, warm, inviting, and provocative learning spaces, which helped to facilitate our learning sequences. An engaged, calm, and organic atmosphere is pervasive and regularly noted by our many visitors, especially other educators. Consultants arriving to provide support to students consistently noted how our school environment was conducive to learning for all students, making it a more inclusive learning space, and many lamented that they wished that all students attended a school that looked and felt

like ours did. Parents and caregivers initially wondered about the desks and seating choices, but many commented that they wished they could have learned in classrooms such as ours. The support we have received from parents and caregivers has been overwhelming as their children not only love coming to school, they are successful, competent, and excited about learning. This transformation did not happen by accident, it was intentional, but we did not anticipate how much these physical changes would positively impact our academic and social emotional growth.

Gardening

After the construction of a beautiful greenhouse that we were able to build using a divisional student engagement grant, we had to plan our learning differently in order to fully utilize this unique and incredible learning space. It became quickly apparent to us that learning could easily be extended out of the classroom and school walls, and that the students flourished with this new learning experience. Another successful grant bid enabled us to plant raised garden beds, with each class having their own section to plant, maintain, and harvest. Our first few years of gardening celebrations are eloquently documented on our *@Life at SSES Blog*, including student blog entries and videos of our harvests and food preparation with vegetables, salsa, kale, carrot muffins, pumpkin pie, corn on the cob, and beans. Some potato crops produced enough potatoes to have a hot potato day for all of the students to enjoy, and like any other year when there was an abundance, vegetables are proudly donated to our local basic needs facility for others to enjoy. A gardening highlight was our Manitoba wheat crop that was grown from wheat donated by a local farmer and winnowed by the students before they used it to bake fresh bread.

Our prolific crops are a testament to the nutrient dense soil created through our composting program. Students participate in the complete cycle, seeing the benefits of composting to our earth. One year our school participated in a 'Follow the Compost' trail with our Sustainability lead teacher. The students made nutritious 'compost soup' by placing parts such as the cut off ends or peels of the garden vegetables that are often thrown out or wasted into a mesh, cheese cloth to simmer as a broth. After enjoying this delicious soup that they had made together, the students wrote about food waste, composting, reducing waste and the positive impact that these considerations have on our health, lifestyles, economy and environment. Recycling, reducing, upcycling, and waste audits are daily occurrences in our classroom and school, with the students being active participants, demonstrating how much they care for the earth and how important it is that we respect and take care of our environment. Educator David Sobel (1998) stated that *"if we want children to flourish we need to give them time to connect with nature and love the Earth before we ask them to save it"* (p. 36, emphasis added).

Physical activity has increased as students dance through the gardens, manipulating the soil and plants, weed, water, and dig through the mud. An enhanced sense of well-being is

apparent as more time is spent outdoors, enjoying the sunshine, the wind, the rain, and the beautiful music of nature. A sense of community is embedded in the act of gardening, with the culmination of this experience being the healthy, nutritious food that has been grown, harvested, and prepared by the students.

Re-Connecting to Nature

In addition to gardening and increasing our outdoor excursions, we are focused on igniting students' curiosities and wonders about the natural world, encouraging them to think about how our daily lives are interconnected with the natural world. As educators, we found that children are naturally curious about the world in which they live, and that it was easy to connect their interests in animals, bugs, the weather, water, rocks, sticks, trees, plants, and the outdoors in to all aspects of the curriculum, including Indigenous Perspectives, in a seamless and relevant way.

Plastic, unimaginative manipulatives and toys were gradually replaced with loose parts, rocks, driftwood, and wooden blocks which students could access for learning and for creative play. It was noted that students were more motivated to read, research, and write after these scheduled exploration blocks, especially when they knew they would be able to share their creations in various formats with their teachers and their peers, and have questions posed to them. Students race outside with their classmates on the first snowfall, peer out their Wonder Windows to analyze the daily weather changes and measure the depth of the puddles that they slosh through during recess or outdoor learning. Words such as *porous*, *velocity*, *depth*, and *DNA* emerge from their discoveries, even in the Kindergarten and grade one classrooms. Authentic reasons to collaborate with the community and other experts emerge. For example, grade one and two classes invited the local scientist in charge of the Lake Winnipeg Research consortium and also the Mayor of Gimli to showcase a 3D conservation park, which the students had designed in explorations and which they created from a variety of classroom materials and plants. Students are able to learn collaboratively with students in other grades, including our middle years and high schools, and neighbouring school communities. Our cross-age reading buddies have also become our nature buddies for outdoor learning. During a grade one/two and grade three/four collaboration, the students selected

something in nature which they wished to represent in their writing, creating video clips of themselves reading their work to post on social media.

One of our grade 4 students won a local writing award for her piece entitled "I am Dirt," eloquently depicting the environmental crisis inflicted on the earth by humans, from the earth's perspective. A reminder to come to school "Adventure Gear Ready" is warmly received by all students, signaling that the next day will be a forest, beach, or field adventure. Grade one/two classes in our school created a school collaboration initiative where they exchanged visits from a neighbouring town to be each other's hosts for nature tour guides to local bushes and beaches, requiring invitations to be written, maps to be drawn and field guides to be generated. Our students are not only engaged, they are deeply invested in their learning. Our personal and professional lives are being impacted and many staff profess that they have adopted various similar practices in their homes, with their own children. Our children share stories during morning meeting time, and express these same sentiments in their documentation books, creative writing, and their journals.

Social Justice, Student Voice, and Inclusion

Our goal to teach students the importance of being participatory, contributing citizens of a democratic society is also being realized through our environmental lens. Students and staff are experiencing, in a compelling way, that all of our actions and inactions matter and that we all need to work together to help each other learn and grow. Increasing our collaborations within our classrooms, our school, other community schools, with our parents, community and globally through social media, is building an awareness of the interconnectedness of our lives. Our school blog has carefully captured these momentous occasions and our Twitter (@LifeatSSES) networks provide us with a voice to celebrate our successes with the world. The support our school has received from parents, caregivers, administration, the local media, other educators, and the community has been incredibly positive and encouraging.

Through our action research, we are flourishing as learners, as educators, as colleagues, and as contributing citizens. Many of us have expressed that along with our students, we are experiencing a greater sense of connectedness and harmony with each other and the world in which we live. But there is still so much more to do, so much more to explore, so much more to wonder about and so much more to accomplish. Our Wonder Wagons may require more sophisticated tools and supplies as we proceed on our teaching and learning journey in upcoming years, but our successes and celebrations with learning, education for sustainability, social justice, inclusion, and well-being will ensure that there will be a good supply of bandages, insatiable curiosity and an abundance of joy.

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Chapter 6

Keeper of the Living Culture

MICHELLE MARSHALL-JOHNSON & BETSY JARDINE

> *For the Mi'kmaq, humanity is all about dialogue. As humans, we need to communicate with each other, be it "metaphorically, academically, or poetically. Language is a medicine: it activates the creative healing dialogue.* (Michelle Sylliboy, in conversation, 2018)

Dialogue is ripe with opportunities for transformation. It is alive, as is knowledge. Living Schools bring an exciting new perspective to education in Canada and around the world. In order to enliven our curriculum, we seek the help of Indigenous educators to *de-standardize* the mind and create a biocentric future for education. It is in the borderlands between cultures that we find the fertile ground for new learning. In this chapter, Michelle Marshall-Johnson, a Mi'kmaw educator and Knowledge Keeper, dialogues with Betsy Jardine, a teacher with an environmental focus and a willingness to learn about possibilities to enliven education from an Indigenous world view. Through their conversation, the two explore how a Living Schools approach in many respects mirrors traditional Mi'kmaw knowledge about the essential nature of teaching and learning.

Since 1880, schooling in Canada has been organized through a Eurocentric settler perspective. Residential schools were the outcome of paternalistic thinking, believing that it was the best education for all, with an eye to the assimilation of diverse cultural traditions. The curricula of the industrial age prevailed and enabled the rapid use of the Earth's resources through the objectification of nature. Today, we ask the help of First Nations to indigenize education and bring us to a "living curriculum" that honours knowledge, language and culture as being alive. Living Schools are based on the question, "What does education look like when life is central to the enterprise?" (O'Brien & Howard, 2016, p. 118). Indigenous knowledge, ways of knowing, and teaching have a great deal to contribute in response to this question.

In Dialogue

Michelle: My mother, Murdena Marshall, was born in We'koqma'q, Cape Breton Island, Nova Scotia (Canada). Her mother died when she was only six, so her grandfather, Grand Chief Gabriel Sylliboy, raised her. My mother was chosen as the Keeper of the Language for her people and she was moulded into that role since childhood. She was bright and learned

(see http://creativecommons.org/licenses/)

C. O'Brien & P. Howard (Eds.). (2020). *Living schools: Transforming education* (pp. 79-92). Winnipeg, MB: ESWB Press. ISBN 978-0-9939534-2-2. Retrievable from www.ESWB-Press.org

languages easily. When they came to take children to residential school[1], Mom explained, "They would hide me in the barn. At first, I was jealous of the ones who went to residential school with their nice haircuts, clothes and shoes. It wasn't until years later that I understood the full impact of the trauma they suffered."

That has been my mother's life work. I ask my parents to guide me. We are a very forgiving nation. We are a forgiving culture. Restorative justice still exists today. You take responsibility for what you have done. Everything you learn is a lesson. There is something good that we learn from everything, whether good or bad. There is always something positive you can learn from it. You may not see it at the time, but it may come into focus later on.

Betsy: Your parents are generous with their knowledge and they have helped a lot of people to understand the positive attributes of the Mi'kmaw culture. Your father, Albert,[2] and your mother, Murdena[3] have made a substantial contribution through their work on the concept of "Two-Eyed Seeing."[4] I began my career in the First Nations community at We'koqma'q. The more I learn about the culture the more that I become convinced that the Mi'kmaw world view could provide a life-centred focus for our education systems. I like the article, *The Cycle of Life* that you sent me in which your mom writes about the Seven Sacred Gifts and healing.

> In a collective society such as the Mi'kmaw world, the structure of society is based on seven virtues, love being number one. We have great love for our children, our Elders, our mother earth, and for our Creator. In a society where all seven virtues are in place, there is no tolerance for selfishness, boastfulness, vanity, deceit, cowardice and unwanted knowledge, but there is a generous amount of forgiveness. Wholistic healing thrives on the generosity of mind, spirit, body and emotions. These four components must all work in harmony and in conjunction with the seven virtues of love, honesty, humility, respect, truth, patience and wisdom. Each is dependent on the other. Love is the first virtue and is the beginning of this mentality. It feeds positiveness to the rest of the four components, therefore opening their souls to receive the seven virtues. Love is ready to forgive all ills, it is

[1] Residential schools operated in Canada for more than 160 years, with upwards of 150,000 children passing through their doors. Every province and territory, with the exception of Prince Edward Island, Newfoundland and New Brunswick, was home to the federally funded, church-run schools. The last school closed in Saskatchewan in 1996. First Nations, Métis and Inuit children were removed, often against their will, from their families and communities and put into schools, where they were forced to abandon their traditions, cultural practices and languages. https://indigenouspeoplesatlasofcanada.ca/article/history-of-residential-schools/

[2] http://www.integrativescience.ca/uploads/files/Albert-Marshall-bioblurb2012-Two-Eyed-Seeing.pdf

[3] http://mikmawarchives.ca/authors/murdena-marshall

[4] Two -Eyed Seeing: Albert and Murdena Marshall with Dr. Cheryl Bartlett were instrumental in bringing the concept of Two-Eyed Seeing to the world. See http://www.integrativescience.ca/Principles/TwoEyedSeeing/ for more information on this ground-breaking concept.

> ready to plant new life cycles and is ever so patient in acquiring and maintaining balance in a person. It also encourages, nurtures and cradles the person to forgive so healing can enter with acceptance. Elders have taught us that the Creator is ever present in all Nature. (Marshall, n.d.)

What can colonial culture do to take responsibility for our actions? Edward Cornwallis was honored with a statue for founding the city of Halifax (Canada), but this controversial figure was responsible for placing a bounty on the Mi'kmaq. The recent removal of the Cornwallis statue from a public place of honour is a beginning, a signifier, that shows a willingness for dialogue.[5] Change can happen when we believe that the future can and will be different from the past. When change is manifest through dialogue, education becomes a living curriculum, one that has possibility for transformation. An openness to listen to the stories of others creates safe spaces for transformative learning.

Living Our Stories: The Learning Spirit

Michelle: Everything we talk about is related to a story because that is how we learn. We learn through story. My mother would never scold or correct if you did something wrong. She would just tell a story. In stories came lessons, lessons about choices, decisions, making plans. For example, she told this story that came to life when our neighbour was lost in the woods. "My son, who was 3 at the time, told my neighbour, 'You should look at your shoes to make sure that they are on the right feet. You were lost because your shoes must have been on the wrong feet, pointing in the wrong directions, so please make sure to check.'" This story was retold over and over again, with my children, and passed on to my granddaughter. It comes full circle, now that the story my mother told me is retold by my children and shared with my grandchildren and will definitely be told for future generations. These lessons are so unique to the Mi'kmaq.

Even today, if I ask my mom for advice, she would never tell me what to do. She would tell me a story and let me come up with my own plan from that. Mom was always teaching me something through a story. My mother never said, "This is the right thing to do or this is wrong." She would only tell a story. It was my job to take what I could understand from the story.

Betsy: Allowing a student to construct knowledge develops independent thinkers. I feel that the Mi'kmaw tenant of the "policy of non-interference" in another person's life path shows a deep knowledge of complexity theory. The slightest change in original conditions can make a huge change in outcomes in someone's life path. An individual has a special purpose in life, and they must find their own purpose. Teaching through story telling allows one to take what

[5] For more information on the Cornwallis statue controversy see http://aptnnews.ca/2018/02/01/cornwallis-statue-removal-marks-historic-day-for-mikmaq/

one wants or needs from the story. Trickster stories show how a slight change in original conditions may lead to huge changes in outcomes. Your mom also let you choose your own path, your own way in life, never forcing you or deciding for you, always allowing you to discern your own future, understanding the power of one's life purpose.

This differs from the "banking model" of education in which the teacher arrives with the books, bearing the knowledge to be made through installments or deposits to the students. Teaching through story allows the learner to construct his or her own knowledge. Two Arrows, Don Trent Jacobs, reminds us that story telling encourages the de-standardization of the mind overriding a focus on "item knowledge" in education. Inquiry-based learning and the pedagogical approaches of the Living School correspond to this methodology. The student observes and records their observations. They then research and record what they affirm in their learning, stating what they now believe to be true, recognizing that knowledge can change. Knowledge, in the Mi'kmaw model, is living and subject to change. Change and transformation in beliefs can be brought about through a living curriculum, based on what one knows, observes and affirms through experience and discovery. Inquiry-based learning espouses this style of learning by analogy.

Traditionally, lessons were learned metaphorically so one was constantly taught to search for the higher meaning. Some of the language that your dad, Albert, uses imbues this level of metaphoric meaning. It makes me think deeply about what he has said in search for its deepest meanings. When I asked him to tell me his favourite tree, he chose the ash, and using this simple question to plant a seed of deeper knowledge, he said, "Not for its importance in basket making or its rarity but for its psychological significance. The ash drops its seed to the ground. However, if the environment is not ready for these seeds, they remain in a dormant state." The knowledge that his people have is waiting for us to become the fertile ground to receive the knowledge. Your dad says people take what they are ready to take from story, what they can understand. It is a constructivist model, not a transmissive one. I hope *I* am now ready to learn.

Living Language and Creative Practice: Expression through Art

> *Go into the forest, you see the birch, maple, pine. Look underground and all those trees are holding hands. We, as people, must do the same.* (Chief Charles Labrador, Acadia First Nation)

Betsy: This week at school we had the "Council of All Beings" (see Figure 1). The students were drummed into the Council to the heartbeat of Mother Earth. Bella Googoo sang the Mi'kmaw Honour Song to begin the ceremony (see Figure 2). Students created masks of their chosen animal and came to the Council representing their chosen animal. Each child gave voice to their animal during the ceremony and spoke on its behalf. Opportunities to express language and culture through art are particularly powerful.

Figure 1
Council of All Beings at Whycocomagh Education Centre

Figure 2
Bella Googoo, a Young Drummer, in Traditional Dress

Another example of this power is Mi'kmaw author Michael James Isaac from the Listuguj First Nation and his book *How the Cougar Came to be Called the Ghost Cat/Ta'an Petalu Telui'tut Skite'kmujewey Mia'w*j. It is a story of identity and how difficult it is to wear your Mi'kmaw identity, when not surrounded by your own community.

Teacher Eryn Sinclair and her drama students at Whycocomagh Education Centre (WEC) worked with Mike to adapt his book to a stage play (see Figure 3). The students brought his words to life telling his story of a cougar that was not easily befriended by the other animals. Mike taught us a lot about the difficulties of functioning in two cultures.

Figure 3
Students in a Play Adapted from Mike Isaac's Book

Michelle: Everything is embedded in the language, including our culture. The root of Mi'kmaw people is language and the root of who we are. Language is the core. Now the Mi'kmaw language is taught in school. I have five children of my own. I speak Mi'kmaq to them. I always speak to them in my language because I want them to know *who* they are. If they don't learn this from me, they may never learn it.

Betsy: The English language is based on nouns or things, sometimes resulting in accumulating *things*. Mi'kmaq focuses on relationship. Now I see Elders in the classroom at schools. This creates space for those relationships that focus on cultural practices to grow. In February I was in a classroom in We'koqma'q. The teacher, a fluent Mi'kmaw speaker, told her kindergarten students that she had allowed her daughter to stay up really late the evening before to lay food out for the animals. "The animals help us all year she explained, so at this cold and hungry time of year, we help them to survive." The teacher was able to integrate traditional ecological knowledge, with her young students. It is a joy to see the language being brought back to life, through this kind of intimate knowledge.

Michelle: Culture is embedded in our language in this way. *Apiknajit* is when we feed the animals in February to help them survive. This has always been the custom of our people. We have respect for every living thing. My Mom would say, "You make sure that you thank that Christmas tree. It gave its life so your family could enjoy the holidays. We have *Apiknajit* in February. We know it is the toughest month, so we say, "Thank you for bringing me this far."

We have our immersion school now. All children are learning Mi'kmaq in school. I would have loved to have a Mi'kmaw teacher. I didn't until I got to university and my mother was teaching the course on Two-Eyed Seeing. A lot of Mi'kmaw students are misunderstood when slow to answer a question. They are reading it in English. They have to translate back to

Mi'kmaq and then back into English again to respond to a teacher. Mi 'kmaq is verb-focused. There are no prepositions. This results in students saying things like, "Get on the car" or "Turn the light." You have to realize that this is just a mode of thinking. There is no gender differentiation either. It just isn't there. This is the way that the language is embedded.

I have learned so much from my parents. Every day you are with them you learn something new. *Etuaptmumk* [6] is a Mi'kmaw word that means "Two-Eyed Seeing." One must see from both eyes, the eye of our own culture and the eye of the Western world view. People must learn Two-Eyed Seeing so that knowledge of the physical is not separated from the wisdom of the spiritual. We can see better when we see with two eyes.

Betsy: In my reductionist tradition of education, the head has sometimes been separated from the heart to create what we think of as neutrality or objectivity. Saving our planet may mean that we need to reconnect "the head with the heart" in education, the cognitive must not be separated from the affective for an integral education. Living Schools ensure that the connection between the head and the heart remains. *Etuaptmumk* also captures the interconnectedness of sustainability—people, place and planet.

When I watch Mi'kmaw children sketch and create art at school, I am amazed at the subject matter they produce. Language learning and artistic expression are closely related. Art communicates the tribal consciousness through image. Loretta Gould, a Mi'kmaw artist who works with young people, does this so expertly today through her art, as do many other artists in your community.[7] Loretta's work demonstrates the tribal consciousness of her biocentric world view and deep relationship with the natural world, *msit no'kmaq:* all my relations, a seamless relationship with all the living world. These images communicate the interconnectivity that your dad spoke to me about in symbolic form (see Figure 4).

Shape shifting is a phenomenon I learned from the students. Our exploration illustrates very well how Indigenous, knowledge, language, art and a Living Schools perspective complement each other. We were reading Chief Dan George's words, "What good is a tree nowadays if your spirit should choose a tree when it dies." The kids wanted to give back, to protect trees and celebrate their spirit. We gathered acorns and with the help of Strathlorne Nursery the students planted over 400 oak trees. When the acorns sprouted two years later, the students transplanted the seedlings into large pots. They gave the trees away to folks who pledged to write a poem of commitment to the tree, vowing to allow it to live out its life without fear, under their protection for their lifetime.

Perhaps it was most appropriate that our first gift of trees was to the Full Circle School in Prince Edward Island. The island students wanted to reciprocate by giving something back. Our students refused, saying, "Pay it forward! Do an environmental good deed for someone else. One day we will then be repaid for our good deed when it comes Full Circle!" I was again amazed at the maturity of these young students. It seems that the longer that I have been in

[6] For a full description of the term *Etuaptmumk* see the video here http://www.integrativescience.ca/News/109/

[7] For more information on this Mi'kmaw artist see https://mikmaq-artist.com

this profession, the more that I have come to realize that the learnings that have meant the most in my career came from times I really listened to the students.

Figure 4

Note: Permission to reprint the artwork in this Volume granted by Loretta Gould.

Living Performance and Keeping the Balance

Betsy: I recall a play called *Keeping the Balance* co-authored by Whycocomagh students about the Bras D'Or Lake[8]. The richness of the play came from the 37 student authors who relied on their own living knowledge to write the play rather than a standard curriculum. In the Junior High Networking Program, students from different classes and grade levels participated in learning experiences of their choosing. Choice enables ownership and creativity. The results were phenomenal. The students developed a play about the Bras D'Or Lake, a place central to Island peoples (see Figure 5). The students worked independently with their choice activity; they were really excited to tell me that the characters in the play were a bit unusual. "What do you mean?" I asked. "For instance, there is the green crab, who was a tourist or visitor to the lake and he will be wearing sun glasses and a camera." Not far from reality, I thought, because the green crab was an invasive species that had arrived in bilge water and was decimating the local populations of oysters that communities relied on for a livelihood.

[8] The Bras D'Or Lake in Cape Breton Nova Scotia Canada has been designated as a Biosphere Reserve by UNESCO. For more information on the Bras d'Or Lake Biosphere Reserve see here: http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/europe-north-america/canada/bras-dor-lake/

Figure 5
Students Explore and Delight in the Bras d'Or Lake Ecosystem

"Then there is Sesqual!" they explained, "Sesqual is the "Spirit of the Lake." They had animated the lake by giving it a voice of its own (see Figure 6). This character pinpointed some of the issues that were faced by the lake. The Mi'kmaw students, often held back in a classroom situation with a mainstream curriculum, had taken a lead role in co-creating the play.

Figure 6
Masks Allow Children to Create New Identities

The biocentric world view of the Mi'kmaw students animated the play with its unique characteristics. All students were concerned about the health of the lake and the Mi'kmaw students were able to make that concern more personal than just studying abstract levels of pollutants. In this creative move, they brought the problems of the lake not only to the minds

of their audience but also to their hearts. Their bold excitement told me that they had struck upon something key to effective environmental and sustainability education.

This wonderful play co-written by 37 students was performed many times, but the most prophetic occasion was at the ceremony to celebrate the designation of the Bras D'Or Lakes Ecosystem as a UNESCO Biosphere Reserve. This celebration brought together the Mi'kmaq, Acadian and Scottish people that had settled around the lakes. Cultural entertainment was lavishly provided on a hillside outdoor stage overlooking the Barra Strait, the conjunction of the turbulent waters of three arms of the lake.

This backdrop of green rolling hills and brilliant blue waters had moved Alexander Graham Bell to announce that "I have travelled the globe … but for simple beauty Cape Breton outrivals them all." The Highland Village of Iona[9] showed the black houses that the settlers called home on their arrival, built with stones, sod and a hole in the roof where the smoke from a fire on the floor could escape. The black house was shared with their animals, cows, horses and sheep to help keep it warm.

For me personally, the synthesis of students working together with their Mi'kmaq, Scottish and Acadian peers brought together the spirit of Lake, the conjunction, the mixing waters of time. The words brought the beauties of cultural exchange together in a united spirit of a people who were trying to understand the health and beauty of a land they had come to call home with the people who had so generously shared the land of Mi'kma'ki, the traditional unceded territory of the Mi'kmaq so that they might have a chance at a better life.

Art does have a way of combining ideas, maintaining traditions but varying the patterns to create novelty. Mitchell Thomashow[10] referred to this as improvisational excellence. When I look at Loretta's art, I see the manifestation of tribal consciousness. I have noticed this with many First Nations students over my teaching career and it always is amazing to me how reality is shaped by combining the spiritual with the material in this way. One is never excised from the other.

A representative of Environment Canada reported that the students at Whycocomagh Education Centre were the first students in Canada to be successful with a federal Eco-Action proposal. The money was used to build a butterfly garden, plant a talus bank, complete a species revival project for ginseng, which grew wild in our area previous to the fur trade and build a greenhouse to give the school gardens a head start. Everyone pitches in to get the greenhouse ready for spring (see Figure 7). The students start plants in their classroom greenhouse windows and then move them to the greenhouse to lengthen the growing season. While cleaning up the greenhouse, Chance, a First Nations student in Grade 2, looked me in the eye and with the wisdom of many ages said, "If we help take care of the earth, the earth will help take care of us." Chance introduced me to a more integral interconnectedness than stewardship alone reaching beyond it to include the Earth as our mother, Pachamama.

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[9] https://highlandvillage.novascotia.ca/

[10] Mitchell Thomashow is an American author, educator, and environmentalist who was invited to Whycocomagh to attend the Eco-Centre Conference *Getting to the Heart of Nature and Coming to Life*. To learn more, see here; http://www.mitchellthomashow.com/our-crew/

Figure 7
Preparation for Planting School Greenhouse

Learning through Living, Observing and Attunement

Michelle: My mother would say, "*Gek pe wisq*, you know it is not going to rain today. The ground will tell you." By observing the natural world, you come to know the signs. If there was dew on the ground, there would be no rain that day.

Betsy: I remember bringing a student to your home to interview your dad, Albert. Before the interview began, your dad took the time to talk to him about respecting small animals telling him that the squirrel and all small animals are here for a reason. All living things should be respected. He explained that one should never harm a squirrel for fun and that if someone did s/he would then be expected to eat the squirrel so that its life would not be lost in vain. Miranda Gould, a teacher and now Mi'kmaw Liaison with our school board, told me about the little people of the forest, the *Wiklatmu'j*. She went on to say *Wiklatmu'j* were "a tool" that helps children behave when on their own in the natural world with cousins and friends. "If we were disrespectful to each other, if we disrespected the people who watched the forest, if we played tricks on each other, they would play tricks on us." "Gentleness toward the natural world is specifically taught in Mi'kmaw culture," Miranda said. I observed this specific teaching with your dad and the young student who interviewed him.

Michelle: We learn by seeing. We observe. If I want to learn something, I have to go to my Elders. I have to learn by watching and listening. I was trying to learn *waltes*, a Mi'kmaw game

of counting and math. My mom told me, "The only way that you can learn how to count is to watch. The Elder will give you the information, when they feel that you are ready for it.

Betsy: Sylvia Moore, a Mi'kmaw educator, scholar, author of *Trickster Chases the Tail of Education* and currently a professor at Memorial University of Newfoundland remembers when, as a teacher, she observed a tank of salmon fry in her classroom. "The salmon became my teachers," she said. Moore also spoke about how the rocks were the grandfathers of the fish, carrying the memory of migratory routes of the fish, so that even the rocks become teachers in this sense, carrying the wisdom of the Earth, the wisdom of the ages. Moore suggests that if we recognize salmon as relatives in creation, and if we have a relationship with them, then we recognize them as, David Jardine[11] says, our teachers. We become part of their life and they become part of ours says Sylvia.

Watching and observing life always carries lessons for the observer. At Whycocomagh School, Rose, the Grade 2 teacher, welcomed a spider into her classroom. As I walked down the hall, I would see the students reading quietly in their desks, while their teacher was bent over the aquarium that housed the class spider they had named Charlotte, the name chosen from the class "read aloud" book at the time, *Charlotte's Web*. The consilience of reality and fiction witnessed Charlotte spin a web and lay eggs only days after the fictional character, bringing to life the words on the page.

Final Reflections

> *We don't feel that Eurocentric knowledge has achieved what it could, if it looked at itself from an indigenous perspective.* (Sákéj Henderson)

Michele: My mother had a job as the keeper of the language. By keeping the language, she kept the culture. Mom wanted everyone to know how beautiful the Mi'kmaw people are. This is now my work also, to share the language.

Betsy: How then can we change education in the future for all children? Would inquiry education be more suited to Indigenous methodology? Learning through narrative encourages higher order thinking skills through the development of metaphorical thinking. It encourages students to trust in themselves as learners rather than to become passive vessels that accept the installments that are made to them and accept a world as inevitable rather than think of the world as a place that can change and evolve as a home for all living things.

Students must construct their own knowledge from stories and observations in the world. I recall your dad, Albert Marshall, saying, "I am not the Master of the Universe. I just live and

[11] David Jardine is professor emeritus at the University of Calgary. His work explores the intersections between ecology, pedagogy, and curriculum. https://scholar.google.ca/citations?user=5OioUVQAAAAJ&hl=en

work here." I thought about these words for a long time, Today, I understand them differently. I understand now the human is not in charge of the natural world, not the steward, the caretaker. It is the natural world that takes care of us and we must reciprocate by giving back to the Earth. As you say, Michelle, it is not always easy to get that direct answer. I guess by being left to think about it over time, we come up with our own answers.

A relational world view builds complexity because there is an understanding that everything impacts on everything. This understanding is inherent in complexity theory, in which the initial circumstance can produce great changes on the outcomes. In many Indigenous stories there is a trickster. It is understood that small changes made by this character can have great impact on outcomes. This concept was understood and taught in Indigenous stories. Complexity theory is perhaps newer to the Western world view, where it was assumed through reductionist thinking that everything could be measured and controlled to produce a certain outcome. We are now in times of uncertainty. Teachers must learn to accept and celebrate uncertainty and to gain comfort with it.

Michelle, your parents have created "Two-Eyed Seeing" which gives us the depth perception to see the world through both perspectives at the same time, an integral approach. Understanding diverse cultural traditions enriches us all. There is so much to be learned from the complex world views embedded in cultural practices. Now that I have come to learn so much about this life affirming culture, I feel, that the language must succeed to allow the world a second chance to come to know the beauty of the Mi'kmaw world view.

It has taken me a long time, of listening to stories, of observing and shaping meanings to understand the importance of the Mi'kmaw language and how it inscribes a world view that is so important to our planet. It is through this relational quality of language that the "constitutive and relational aspects" works in tandem to shape our world view or ontology, either affording power and agency to the other-than-human world or dismissing it as what David Jardine calls 'voiceless.' In Mi'kmaw culture, power is afforded to the eel for changing the course of history, the squirrel who has his purpose, or the salmon who was Sylvia Moore's teacher. Michelle, I have learned so much from your culture and yet I know that I have only scratched the surface of the depth of your cultural tradition. I feel so grateful to you and your family for sharing your ways of learning with generosity and respect. One who speaks the language must have a much deeper understanding.

Michelle: My father, Albert, tells the story of the two wolves that each of us have within, good or bad. We must continually choose which wolf to feed. This is something that I continually pass on to my children. In our Mi'kmaw world, the Elders are responsible for educating the child, but not in the dominant society. In the Mi'kmaw society, child development is as sacred as the ideologies associated within the sacred circle. Every circle in a child's life is considered as accomplishment. Mi'kmaw education was provided orally by Elders, the values, customs and traditions were taught through dialogue, storytelling and through living the language. The Mi'kmaw language is instrumental in providing a basis for a code of ethics. Values conveyed by the language teach what is acceptable and unacceptable behaviour. Values are taught through these concepts that Mi'kmaq are able to expand their knowledge. The Elders guide

children through the path of wisdom and knowledge. The Elders have been our educators for thousands of years, and it is through them that the Mi'kmaq have survived as a people. Through our Elders, we remain a strong and proud people. Times have changed drastically but the influence of the Elders remains steady. It is a privilege to have had such parents who have the gift and knowledge of the Mi'kmaw language. But most importantly they continually share their knowledge with others.

Weli'oq wjit msit koqwey (Thanks for everything) *aq Kesulo'q* (Albert & Murdena).

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Chapter 7

Supporting Living Schools through Transformative Governance and Leadership: A Vermont Experience

BRENT KAY

Transformational change within any organization requires a system-wide, purposeful focus. Most importantly, however, transformational change must be engaged with the intent of achieving sustainable and scalable results. Carver (2002) reflected the reality that most educational reform movements have been focused solely at the school level and paid little-to-no regard to the many other significant influences on the teaching-learning environment, namely, school boards and governance structures, central office, and the communities that schools serve.

The Effective Schools literature has, for over three decades, sought to identify common characteristics of successful schools. For example, Dufour and Eaker (1992) identified ten recommendations for effective change: (1) people improvement is crucial to school improvement; (2) excellent schools have a clear vision of their goals; (3) the day-to-day operation of excellent schools is guided by a few shared central values; (4) excellent schools have principals who are effective leaders; (5) the shaping of organizational culture and climate is critical to the creation of an excellent school; (6) the curriculum reflects the values of the school and provides a focus that helps teachers and students "stick to the knitting"; (7) excellent schools monitor what is important; (8) teachers in excellent schools are leaders within their classrooms; (9) excellent schools celebrate progress toward their vision; and (10) excellent schools are committed to continual renewal.

The concept of Living Schools aligns with the Effective Schools literature and outlines a model of transformation that "connects K-12 educational reform with Education for Sustainability, sustainable community development, and individual well-being" (Howard, O'Brien, Kay, & O'Rourke, 2019). The Living Schools Attributes and Practices framework (Howard & O'Brien, 2018) highlights organizational structures that support the development and success of Living Schools. Organizational structures are undergirded by a shared vision that teachers, students, parents, and the community have had input in creating. Strong collaborative relationships support an ethos of equity, inclusion, and diversity. There is explicit support for sustainability education and *well-being for all.*

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C. O'Brien & P. Howard (Eds.). (2020). *Living schools: Transforming education* (pp. 93-104). Winnipeg, MB: ESWB Press. ISBN 978-0-9939534-2-2. Retrievable from www.ESWB-Press.org

Transformation of this nature requires a new vision of educational governance and leadership and, therefore, a break from the traditional focus on hierarchies and superstructures. For example, Brooks and Holmes (2014) suggested the employment of an ecosystem approach to school structure and governance. In other words, to realize sustainable and scalable change, school systems must act holistically. With all components of the school system working in unison, teacher and student agency is enabled and schools can be situated as integral organizations within communities by becoming regional Community Economic Development (CED) partners. This is a vision of organization, governance, and school leadership that understands schools as contributors to the well-being of communities and leaders in sustainability initiatives that support communities to thrive for the benefit of the citizens.

The Vermont Context

Vermont is primarily a rural state set within the beautiful Green Mountains. Its capital city, Montpelier, is the least populated state capital in the United States with less than 8,000 inhabitants (United States Census Bureau, n.d.). Vermont's education system is currently under significant reform; however, during the writing of this chapter, there were 307 schools governed by 277 school districts that served approximately 85,000 students. Vermont was among the highest education spending states in the union and spent nearly $17,000 U.S. per student per year. Further, between 2001 and 2011, state and local per pupil expenditures for pre-Kindergarten to Grade 12 increased by 83.7%, thereby creating an environment of intense legislative and public scrutiny (Picus et al., 2012). In brief, Vermont consisted of many small, rural schools that were, on the surface, very well-funded and that were autonomously governed by equally small, independently elected school boards. Each town in Vermont voted on their respective school's annual budget, thereby further facilitating isolation and significant duplication of services and organizational structures.

The Orange Southwest Supervisory Union

In 2002, the Orange Southwest Supervisory Union (OSSU) was a loosely coupled amalgam of five separate school districts. Located in central Vermont, the OSSU consisted of three elementary schools (PK–6), one comprehensive high school (7–12), and a regional technical high school (11–12) that served 21 surrounding towns. The OSSU was governed by five school boards that operated independently of each other and without a system of governance. There was no vision or mission, policies were outdated and inconsistent with practice, union grievances were frequent, there was no strategic plan, organizational outcomes were not monitored, the districts were heavily overstaffed, and the employees were among the lowest paid in the state. As a result, the OSSU was experiencing significant difficulties, including declining enrolment, substantial budgetary increases, increasing deficit spending, deferred maintenance leaving all but one of its school facilities in need of extensive upgrades and remediation, and a revolving door at the executive leadership level—the OSSU had turned

over five superintendents of schools during the previous seven years. Most importantly, however, the teaching-learning environment reflected little innovation, was not student-centred, lacked meaningful connections to its communities, and reflected traditional 20th-century practices.

Over a 15-year period (2002–2017), the OSSU made consistent improvements at all levels, particularly in moving its education system to align with important attributes and practices of a Living Schools model. In many ways, the OSSU was exemplary of what is seen in numerous places across Canada and throughout North America; its schools consisted of teachers and school-level leaders who worked very hard in almost complete isolation of one another, devoid of any system-wide support and coordination, with no purposeful alignment of their financial (and other) resources with desired outcomes. As a result, teacher and student voice and agency were stifled amid an over-bureaucratized, highly inefficient system. During the period between 2002 and 2005, the OSSU's top priority was to begin by building a solid foundation at every level of the organization from which to build upon.

By 2017, the OSSU's accomplishments were significant—the OSSU had become recognized as a centre for innovation. For instance, five of its 10 senior leaders were recognized for their achievements at the Vermont and at the national level. The comprehensive high school was awarded the New England Secondary School Consortium (NEASC) and Great School Partnership's Champion Award for Education Leadership for its innovative approaches to career and workforce development. The regional technical high school piloted the nation's first full-year, Spanish immersion Global Business Management Program and implemented a full-year Advanced Manufacturing Program in partnership with three regional advanced manufacturing companies and the Vermont State College System. The OSSU's CED partnerships had blossomed, leading to the formation of a multi-million-dollar scholarship endowment that enabled its high school graduates to attend the Vermont State College system tuition free. The elementary schools were recognized for their state-wide leadership in implementing Multi-Tiered Systems of Support (MTSS). In short, the OSSU and its schools were on their way to becoming a Living School *system* that embodied the principles of 21st-century learning. They had integrated the use of state-of-the-art technology, fostered a teaching-learning environment that was replete with creativity, innovation, and entrepreneurship, and had become a strong CED partner within a region that was historically economically depressed, thereby contributing to the sustainability of the communities.

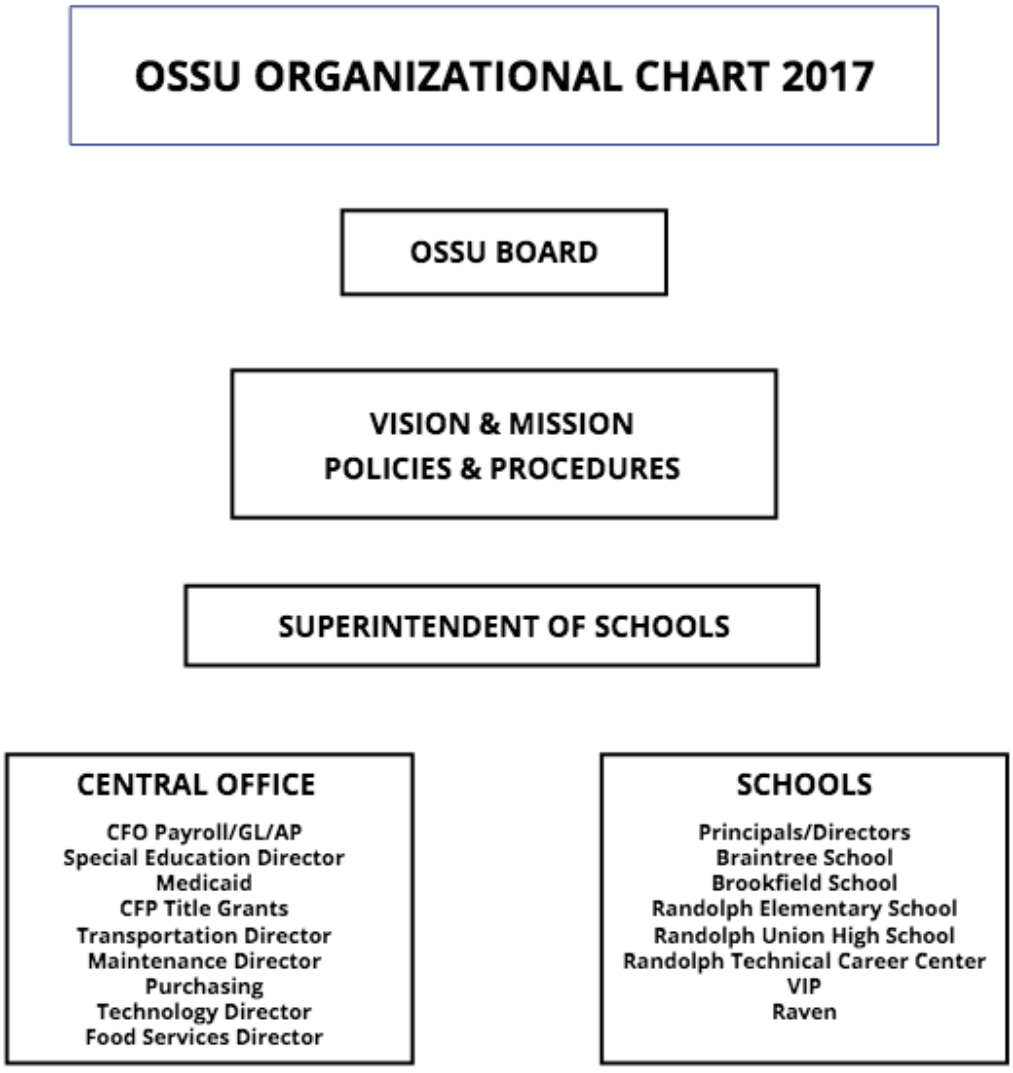
The OSSU's 15-Year Journey

To that end, in 2002, the OSSU began a long, persistent journey towards becoming a school system that reflected the attributes and practices associated with Living Schools (though they were not using the name during this process). The school system was reorganized to be deeply connected to community and to embody 21st Century learning. Teacher and student voice and agency were moved to the centre, and meaningful relationships with regional CED partners were forged.

In 2002, the OSSU existed within an antiquated structure. Despite significant funding levels, its structure prevented collaboration and professional learning communities, created significant redundancy, thereby rendering its schools ineffective and inefficient. The organizational structure from 2002 and 2017 (Figures 1 and 2), demonstrate a substantial level of change during that time period. In 2002, the OSSU was a loosely coupled amalgam of five separate districts with independent school boards overseeing each entity: There were five duplicative system components, including finance, facilities, curriculum and instruction, policies and procedures.

Figure 1
OSSU Organizational Chart, 2002

Figure 2
OSSU Organizational Chart, 2017



By 2017, the school boards had unified and centralized their business functions, thereby creating a coordinated system that enabled school-level leaders, teachers, and students to focus on implementing core attributes and practices characteristic of Living Schools. Further, the organizational restructuring and the move to a more cohesive, holistic approach resulted in significant financial efficiencies. For example, between 2002 and 2017, the consolidated district increased the percentage of spending on teaching and learning from 64% to 73% of its total budget.

In 2002, the five separate school boards and school principals collectively met for the first time to discuss their future. During that meeting, several issues arose that demonstrated to everyone involved that wide-ranging change was needed. For example, there was unanimous agreement that the primary role of the principal was educational leadership, and yet, when the principals were asked what prevented them from focusing on educational leadership, they identified several key distractions from their work, including financial management, coordinating snow-plowing contracts, addressing technology-related issues, dealing with leaking roofs, coordinating transportation routes, and discipline-related issues, to name a few. As a result, the principals spent very little time focusing on educational leadership. Teachers and students were left to their own devices and stifled by the lack of effective school-level leadership within an overbearing bureaucratic structure.

The school boards also recognized that there was no overarching vision and mission statement to guide the school system. Because the five school boards operated in nearly complete isolation from one another, they had never been afforded the opportunity to share and learn from each other. Further, the school boards did not utilize a governance model to guide their work, and there was no training or professional development for new and veteran board members.

The five redundant systems not only stifled professional learning, they created multiplicity in almost every organizational function. There were five separate approaches to curriculum and instruction, facilities management, technology and integration, human resource management, and finance and budgeting. Each school district within the OSSU was heavily overstaffed, resulting in uncompetitive wages and benefits and divergent philosophies, operations, and practices.

After that initial meeting, the school boards and superintendent spent nearly 6 months developing a comprehensive strategic plan, a process that involved community members, students, teachers, staff, administrators, board members, and local community leaders. To frame these discussions, a guiding question was asked: "In 10 years, what should a graduating senior know and be able to do in order to live well in our globalized world?" In total, 15 public forums were held, along with countless other meetings with different internal and external stakeholders.

Asking a future-based question was imperative; it focused the discussions on what a vision for the future ought to be and shaped the development of a relevant vision and mission statement. Discussing what people wanted for their children's futures and for the futures of their community was a unifying experience. In addition, the discussions resulted in the identification of over 50 operational/systematic improvements that were required to enable our pursuit of what we now understand as being a Living School model. Freeing-up school principals so they could focus on, for example, instructional leadership, adopting a governance model (including board professional development), coordinating facilities, technology, finance, and food service programs. Perhaps most critical were the identified needs for the creation of teacher professional learning communities and establishing true partnerships with regional CED leaders. It became painfully clear that it would take years to achieve the desired outcomes, and that patience and persistence would be tested many times in the coming years.

Sustainable and scalable education reform cannot be achieved without taking a holistic approach. There are now decades of failed educational reform movements and fads behind us, and yet education policymakers continue to employ the same compartmentalized approaches. Recognizing the need to depart from a dysfunctional pattern, the OSSU realized that if it were to succeed, it had to take under consideration all of the components of its ecosystem, and embody the principles of 21st-century learning, sustainability, *well-being for all*, and CED. There could be nothing that escaped scrutiny. The OSSU school board had to exemplify effective governance, teacher and student voice had to be enabled, and principals had to become educational leaders; the OSSU's schools had to be integrated into the regional CED partnerships.

Governance, CED, Teacher/Student Voice, and Agency

The remainder of this chapter will focus on three specific areas of reform that reflect a Living Schools approach: governance, schools and CED partnerships, as well as teacher and student voice and agency. One of the core challenges facing governing boards is their failure to utilize a coherent system of governance (Carver & Charney, 2004). Effective governance is an essential component of healthy organizations and yet there are very few resources for boards to access for professional development. Without effective governance, organizations lack purpose, have a tendency to become overly bureaucratic, ineffectively manage internal and external communications, foster inefficiency, and often fail to identify, monitor, and achieve their desired outcomes.

Colley, Doyle, Logan, and Stettinius (2003) identified the following characteristics of effective governance. Successful organizations are led by boards that know the business at hand, operate within the principles of governance, focus on achieving the organization's desired outcomes, and effectively manage internal and external relations. At a minimum, board members must ensure they obtain the necessary skills, knowledge, and ability to fulfill their responsibilities. However, to effectively lead transformational reform and to support schools in becoming Living Schools, traditional notions of governance must also be transformed.

In 21st-century teaching and learning documents, including high-profile reports and whitepapers, issues of governance in the implementation of transformative educational change are rarely addressed (Ananiandou & Claro, 2009; Brooks & Holmes, 2014; Fullan & Langworthy, 2013, 2014). Instead, transformational reform must include expectations for governing boards, identify and value their work, and provide for professional development and training to support their work. In turn, governing boards must ensure their vision, mission, policies, and procedures explicitly embody the principles of sustainability and *well-being for all* and 21st-century learning.

In 2018, the Nova Scotia government (Canada) dissolved all local school boards, thereby eliminating an integral part of the school system's ecosystem. This is a considerable digression from the amalgamation that occurred with OSSU. One might ask who will fill the void in forging relationships with local traditional CED partners, or guiding the development of a

school district's vision and mission statements through the engagement of local communities and stakeholders in vital discussions about our public education's future, or identifying and monitoring desired outcomes that resonate with local communities, or ensuring that the culture and climate of our schools embody the principles of sustainability and *well-being for all* and 21st century learning? A disturbing potential outcome is that these vitally important roles will fall on the shoulders of school-level principals and teachers and, therefore, be pushed to the sidelines and become completely ignored.

Additionally, local schools must become integrated into regional CED partnerships. Howard, O'Brien, Kay, and O'Rourke (2019) outline several isolated examples where schools, teachers, principals, superintendents, and school boards work collaboratively with CED partners to foster the development of a Living Schools model and 21st century teaching and learning environments. Schools can no longer function in isolation—they must forge meaningful partnerships with their community and political leaders, post-secondary institutions, and business leaders and entrepreneurs. By building interconnected CED partnerships, the school ecosystem is expanded and strengthened, thereby significantly improving their ability to affect sustainable and scalable transformational change.

Through purposeful and persistent action, the OSSU slowly evolved into a strong, regional CED partner. For example, in 2014, the OSSU's superintendent reached out to a dozen executive leaders across many sectors, including manufacturing, finance, higher education, communications, health care, et cetera, and began having conversations with these leaders about their respective organization's strategic plans. The conversations focused on what these executive leaders believed would be the most important and difficult future challenges in their respective sectors. After identifying these future challenges, the executive leaders were introduced to a small leadership group from the OSSU's comprehensive high school, including principals, lead teachers, and students. The purpose of these meetings was to (1) have these executive leaders share their future challenges with the school's leadership team; (2) have open discussions about possible solutions to these future challenges; (3) identify opportunities within the school's teaching-learning environment to address these challenges; and (4) identify partnership opportunities between the OSSU and the executives' organizations.

As a result of these interactions with its regional CED partners, the OSSU implemented three key initiatives: (1) an off-campus "School of Tech"; (2) an on-campus Problem-Based Learning (PBL) laboratory; and (3) an Advanced Manufacturing program. The "School of Tech" was a pilot partnership with a local advanced manufacturing company. The entire course took place on the company's shop floor, thereby requiring teachers and students to travel to the manufacturing plant to work together with real people doing real jobs. The course focused on the science of plastics manufacturing and students learned every facet of the company's manufacturing process, including purchasing and distribution, human resources, finance, research and development, quality control, and much more.

The PBL laboratory required a significant transformation of the comprehensive high school's antiquated industrial arts classroom into a 21st-century "high-tech" learning environment. After the capital project was completed, students from Grades 9 through 12

began signing up for multi-grade teams to address the specific challenges identified in the executives' strategic plans. Each cross-grade team was responsible for interpreting the identified problem, identifying a methodology for exploring the problem, creating a financial/business plan outlining the required resources to support their work, and demonstrating their work in public to a panel consisting of these executive and regional leaders.

The Advanced Manufacturing program was the OSSU's most comprehensive partnership endeavour. The partnership consisted of three local advanced manufacturing companies, the Vermont Technical College (VTC), and the OSSU's regional technical high school. The OSSU worked closely with its CED partners to transform its woodworking shop into a state-of-the-art advanced manufacturing space that aligned closely with VTC's advanced manufacturing program at the college level and the real-life working environments of the three advanced manufacturing companies. Students in the OSSU's advanced manufacturing program had access to work internships at the three advanced manufacturing companies while in high school, full-tuition scholarships to attend VTC's advanced manufacturing program, paid internships while in college, and full-time employment after graduation at the three advanced manufacturing companies.

All three initiatives were designed to provide students with experiential learning opportunities that were based in real-life problems and that served to expand the teaching-learning environment beyond the walls of the schools. Further, all three initiatives required a transformation in teaching and learning and exemplified a holistic approach to CED.

Transforming Patterns that Suppress Teacher and Student Voice

Enabling teacher and student voice and agency is perhaps the most important goal of transformational change and the creation of Living Schools. Without teacher and student buy-in, our chances of realizing sustainable and scalable transformational change are minimal. The United States provides us many recent examples of failed whole-scale reform movements. For example, in 2002, under the Bush Administration, the No Child Left Behind (NLCB) act became law and ushered in a wave of unprecedented accountability designed to improve the United States' international test scores. Under NCLB, each state was given the responsibility of developing and implementing standardized tests for mathematics and reading. Based on the annual outcomes of these standardized tests, students, teachers, and schools would be identified as "passing" or "failing." Schools that were identified as "failing" for four consecutive years were subject to a litany of consequences. Reback, Rockoff, and Schwartz (2014) report that states had to impose escalating sanctions on schools that failed to satisfy Adequate Yearly Progress (AYP) requirements for exam proficiency, including allowing students to transfer to other public schools, forcing schools to pay for students from low-income families to enroll in after-school tutoring programs, and, ultimately, closing or restructuring persistently failing schools.

There were several problems with NCLB, including the fact that every state created different standardized tests resulting in some states having much more rigorous testing requirements than others. However, perhaps the most significant problem with NCLB was its

autonomy from the teaching-learning environment. NCLB was developed at the Federal level and implemented at the State level without the involvement of teachers and students and, therefore, it had limited relevance to teachers and students. Schul (2011) wrote, "Thanks to NCLB, teachers have been stripped of their professional judgment" (p. 2).

Living Schools Foster Engagement, Relevance, and Agency

Instead of focusing on public school reform through standardized testing and top-down accountability, we need to recognize and understand the importance of teacher and student voice and agency in developing board policy and practice. The growing body of literature on 21st-century learning suggests that reform should focus on critical learning, communication, collaboration, creative problem solving, character education, citizenship, and global awareness. However, it is essential that 21st-century learning initiatives are also explicit about the larger purposes of education that reflect sustainability and *well-being for all*, and this has been notably lacking in the literature (Hopkins, 2013; Howard, 2018). In order to achieve reform of this nature, teachers and students must play a central role and not be relegated to the sidelines; the following mental exercise demonstrates why.

Think of a child you know and reflect upon a time you saw that child doing something they were not interested in. Now think of that same child and a time when they were engaged in an activity that deeply intrigued and interested them. Ask yourself what the differences were in the levels of learning and outcomes for the child in both situations. In the former situation, the child was likely "going through the motions" with minimal effort and was easily distracted. In the latter situation, it is likely that you remember the child as deeply engaged, happy, flourishing, and focused on the task at hand. Placing teacher and student voice and agency at the forefront of educational reform will significantly improve relevance in the teaching-learning environment, restore teacher professional judgement in the learning process, and result in higher levels of engagement among students.

Considerations

This chapter provided a brief outline of the 15-year evolution of the OSSU toward a system aligned with the principles of Living Schools. In many ways, the OSSU was reflective of similar school systems throughout Canada and the United States. Teachers and school-level leaders worked very hard attempting to implement ill-fated educational reform initiatives within over-bureaucratized structures that stifled teacher and student voice and agency. An absence or lack of effective school board governance facilitated high-level turnover of OSSU's central office leadership, preventing the coordination of system-wide initiatives and efficiencies. School principals were left spending the majority of their time on administrative tasks outside their expertise and mandate, thereby preventing a focus on educational leadership. In summary, the OSSU was unable to engage in sustainable and scalable reform

initiatives such as Living Schools and CED partnerships. Most importantly, teacher and student voice and agency were not prevalent.

The OSSU experience demonstrates that traditional school systems can successfully evolve into Living Schools systems. However, the OSSU experience also demonstrates why we have reached a critical point in time where political, business, educational, and community leaders must come together to examine the relationship between large-scale school district amalgamation and the complete removal of local school boards (e.g., Nova Scotia) with our inability to achieve sustainable and scalable nationwide reforms. If we are to achieve sustainable and scalable reform at this level, we must expand traditional CED partnerships to include schools and strive to embed schools within the fabric of their local communities. Further, the OSSU experience demonstrates the vitally important role of school board governance in applying a holistic approach to reform initiatives. Without effective local school board governance, it will become inherently more difficult to engage CED partners and forge meaningful community-based relationships. The creation of large-scale and provincial-wide systems (e.g., Nova Scotia) may very well result in schools losing their community flavour and identity, thereby further eroding teacher and student voice and agency. The risk is a regressive pattern rather than a progressive one that leads us towards a healthier and more sustainable future.

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Chapter 8

Featherston Drive Public School: Teaching Interconnectedness in an Ecosystem of Relationships

TANYA O'BRIEN & DAVID COYNE

We are two teachers who have chosen to stay at Featherston Drive Public School for our entire teaching careers. As you read this chapter, we think you will understand why. Let us introduce ourselves. Tanya O'Brien: I have been teaching for twenty years and special education is my passion. I am a Learning Resource teacher. David Coyne: I was a chef who became a teacher later in life, inspired by becoming a father. I have been teaching for seven years and I now teach new Canadians about language and life.

Tanya and David

"Everybody is so nice here!" is one of the expressions most often heard from students, teachers, parents and visitors when describing Featherston Drive Public School. They regularly comment on the atmosphere of helpfulness, friendliness, and a sense of happiness that seems

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C. O'Brien & P. Howard (Eds.). (2020). *Living schools: Transforming education* (pp. 105-117). Winnipeg, MB: ESWB Press. ISBN 978-0-9939534-2-2. Retrievable from www.ESWB-Press.org

to be a part of the culture from the moment they walk through the front door. To be honest, this "nice" description of us has been such a part of our norm, almost comical at times, when you hear it over and over again that we didn't fully appreciate all of the factors that contribute to creating this warm and welcoming environment.

It was only upon deeper conversations about our work place, followed by a visit from Dr. Catherine O'Brien, that we realized that our happy school, where student and staff well-being are highly valued, was actually a reality because our school was in alignment with many of the attributes and practices that characterize a Living School. When a group of grade 3 students were given the definition of a Living School by Professor O'Brien, a collective cheer went up as the students affirmed their belief that their school is a Living School. It turns out that we were, in fact, better than nice! Through the many conversations that have followed, grappling with what makes us a Living School, what stands out for us is that our school is a place built on good relationships, tightly connected to people and the planet! We are alive! We are happy! We are a Living School! We are excited to celebrate this view of ourselves and to explore how to sustain it.

Drive by our school and you will see an older looking building with twelve blooming gardens, a colourful bench, paper hearts in the plants, a variety of old and freshly planted trees, berry bushes, kindergarten students playing in their fenced-in yard, and an array of strollers and big green compost bins flanking the entrance. It is an inviting sight, rich with life. Inside the building you are first greeted by a wall hanging that says, "Do all the good you can, to all the people you can, for as long as you can," which has become our mantra. You will find art and projects displayed on the walls, posters of announcements, and no shortage of clubs and teams to join. Perhaps we seem like many other schools, but we believe that there are specific qualities that make us different.

We have come to recognize that a Living School resides in its people. Our school has been fortunate to have a mix of teachers and students doing things they believe in and doing things that they are predisposed to do. This has led to a remarkable happiness.

When we were approached about presenting our school as a case study, we committed to trying to be honest in our observations and to question ourselves, including our students. Over the past year our administration provided support to collect information from staff and students with the goal of figuring out the recipe to our Living School. We interviewed whole classes directly and used anonymous online questionnaires for staff and students. We asked questions such as: How did we get to this place? What are the ingredients that contribute to our happiness? What do we do to make sure it keeps working? We interviewed individual students, teachers, support staff, and administrators and gave them opportunities to explain their thoughts and motivations behind their daily interactions. What made them happy? How do we ensure others stay happy?

The Lives of Our Living School

Many of our 325 students come from East African and Arab countries, many of them newly arrived in Canada. Their families' courage, strength, and determination permeate our school culture. There are affluent neighbours and socially assisted neighbours. There are children with autism welcomed to Featherston's special classes designed just for them. There are French Immersion students travelling to our school to have better access to French language classes. There are toddlers attending the family literacy centre with their young parents and nannies. The children of the school range in age from two years old to 13 years old. Many teachers believe all ages should all be interacting and have initiated integration times, reading buddies, gardening groups, and schoolwide sport days.

Current and past administrations have welcomed special programs to the school, paving the way for inclusion. Our principal, Lori Lovett, hired staff with a vision of gender balance and varied teaching styles. She supports unique projects and thinks a little 'outside the box' while also looking at 'the big picture.' When required, she stands up to teachers, parents, administrators, and students in the name of student success. Lori takes a personal interest in the students and checks in with them regularly.

Then there are the teachers . . .

Some of them love sports. They coach teams, attend tournaments. They find free summer sport camps for those who cannot afford it and seek funding for equipment. A couple of teachers love music, (one is a DJ); they create bands, with band practices, and invite high school bands to visit. They come early to school to teach students guitar and drums and find grants to help those who can't afford lessons or instruments.

There are teachers who are thespians and produce a full-scale musical theatrical production. For the past few years, a musical has been the culmination of a year's worth of work. In that process, multi-aged relationships are cultivated, new skills are discovered, and many lessons are learned providing yet more opportunity for student success. Parents flock to the performance which makes for a great community gathering.

There are teachers with environmental and social justice causes that they feel strongly about. They run clubs, help students organize assemblies, announcements, displays, campaigns, food drives, protest marches on Parliament Hill,[1] and relationships with groups and parents organized around local community issues. They build gardens and greening projects and invite every class to participate meaningfully. All these causes become vital organs of the school's body.

Teachers with unique passions create clubs and organize special events, with benefits that trickle into classrooms: tech club, knitting club, board game club, chess club, and cooking club. Children who didn't know they would love programming or that they could beat the champion chess player find new horizons, and everyone else has fun and learns to collaborate and see a teacher engaged in a passion. Sometimes students suggest clubs based on their interests, and a teacher supports and encourages them.

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[1] Canada's capital is Ottawa and our federal government is located on Parliament Hill.

Some teachers go out of their way to take care of their fellow teachers, with unbidden cards filled with reassuring thoughts, and little treats. They plan staff breakfasts with outrageous hats, and everyone looks forward to "so-and-so's" smoked salmon dish or Greek sugar cookies. They notice when someone needs help, and 'leak' it to the right people. The staff room is full of supportive, caring talk and laughter at lunch times and breaks. Most teachers do quiet acts of kindness for their students and their families and for other staff that exceed our mandate as educators, such as going to a hospital to spell off a single parent who needs to go home for a rest, going to personally pick up a student whose complicated life gets in the way of attendance, meeting families in the neighbourhood with food cards, or providing money for graduation suits.

Some Projects that Distinguish and Define Us

Shannen's Dream and First Nations, Metis and Inuit (FMNI) Studies

If you walk toward the school, one of the first things you notice next to the flagpole in the distance is a collection of paper hearts wedged into a garden with carefully planted flowers. "The Heart Garden" is by far one of the most special gardens in our school, planted and cared for by the students in memory of Residential School Survivors.[2] The forget-me-not flowers that line it are in memory of Shannen Koostachin, a young girl from at Attiwaspikat, First Nation and the namesake of a very powerful group of students in our school. The messages written on the hearts are simple, yet powerful. They are a collection of names, expressions of solidarity that share a sentiment of compassion and equity: "We care about you," "Be hopeful," and "We hope you get the same things we do."

Five years ago, teacher Annie LeBlanc, like all other teachers announcing extra-curricular sign-ups, made an announcement. "Shannen's Dream is a new team. Everybody is welcome." Five years later, members of the team recall the curiosity that prompted them to join. Who was Shannen? What was the dream? In hindsight, they all said that part of the appeal was wondering about the answers to those questions. A Grade 6 student said, "When I heard about it, I wanted to join because I didn't know what it was and I needed no special skills or talent except to help people". They would learn that Shannen was a girl who had a simple request, for a "safe and comfy school" in her own community. Shannen's dream was to bring fair funding to First Nations schooling systems. She was the leader of a movement that focused on student voice to bring about change. Shannen had to leave her community to go to high school and died in a car accident waiting for her dream to be realized. At that first meeting, there was much listening and enough support to create a team that would mobilize to answer a call to action.

Being happy and safe in a functional school should be for everybody.

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[2] From the 1880's to the late 20th century the Canadian Government and Christian Churches removed Indigenous students to live in schools where they were indoctrinated into the dominant culture.

For the past five years Shannen's Dream has worked hard to develop an understanding of First Nations, Metis,[3] and Inuit (FMNI) issues. The team grew, many bringing friends of all ages along who could draw, write, and listen. Sometimes this was tricky with younger students feeling sad about some of the topics that were difficult. These team members, with teacher and parent help, proudly now tell that they have been in the group since second grade. They have written cards and letters to the Prime Minister to fight for fair funding for schools and have hand delivered letters during marches on Parliament Hill in Ottawa for "Have a Heart Day." They have learned and championed for *Jordan's Principle*: that First Nations children should have fair and equal access to government-funded services. Along with Spirit Bear, they brought teddy bears. They have invited the whole school, including our English Literacy Development students, who are new to Canada, to picket and make speeches on Parliament Hill. Involving students authentically in the Democratic process—exercising the right to protest and advocate for those who have been treated unfairly—connects curriculum to the real world, and offers some students who have endured dictatorships, such as Bashar Al Asaad's regime in Syria, a taste of hope in their new country.

Many members of the team recognize that it is not common at other schools to have a group like this. When asked why Featherston may be a leader in this area, a Grade 5 student said, "Featherston is inclusive of other cultures and talents and diversities and backgrounds. There are lots of people here. We are showing that all groups are important and this group is maybe even the most important, the first ones for Canada." Others noted that you need a teacher to guide you and supervise. A Grade 5 student said, "Maybe at other schools they don't have teachers who want to run a group like this and you need a teacher for a club or a team." This is best summed up by Liv in grade 5, "Shannen's Dream showed me that others don't have the same rights as I do in my own country. I didn't know it was like that. I learned to appreciate what I have."

In time, the number of students involved with Shannen's Dream lent itself to incorporating FMNI studies into our school improvement plan and regular day practice. Each morning before the national anthem, the land that we are on is acknowledged as being unceded[4] Algonquin Territory. Teachers have worked in small teams, have traded preparation times, resource support time and skills to ensure that the school as a whole moves towards a better understanding of Indigenous culture and ways of knowing through the Arts, Phys-Ed, Language Arts, French and History. These activities move far beyond rote learning or platitudes.

The power of Shannen's Dream five years later comes from Student Voice. When asked, all students in the club said that they were "unhappy that it's unfair, but happy we are doing things to help." They seemed very confident that they had been tasked to spread the word. Many of the students said sharing their learning and activism was easiest with their parents and

[3] In Canada, the term 'Metis' typically refers to people whose ancestry includes both First Nations and European settler descent.

[4] Land that was taken from the Algonquin people or other indigenous peoples without treaty or reparation.

some friends who did not go to our school. Others, over time, have developed skill and wisdom beyond their years and have brought their ideas to members of Provincial and Federal Government. Each time, approaching the conversation from a position of respect and a willingness to help where they can. They believe that they are an active part of contributing positively to their community. A Grade 8 student wrote, "By restoring these relationships, we become united as one in this nation and we are able to include many more different perspectives into our decision-making processes than we could if we keep the gap between the different groups of people in Canada. This helps us make decisions that are respectful to a majority of people's needs and values, which allows us to live in harmony."

Why Food Matters - David Coyne

Prior to becoming a teacher, I was a chef. A kitchen was a safe place for me, a blend of creativity and discipline, of individual and group effort. Over the course of my career I became a father and found a new need to be more ethical, sourcing locally as much as possible and helping my staff to live a more balanced life. When I chose to become a teacher, I already knew the power of gardening, and of a shared table. My experience with an after-school cooking club for English Literacy Development (ELD) students confirmed all I had held dear. It is a program I helped initiate to bring my grade 8 students to the high school, where they cooked with high school students and learned not to be so nervous about the next step of their school careers. Students from over 15 countries came together to cook, eat, and talk. Eventually, parents were also invited in to teach us, and students from grade 6 to 12, from four different schools, from ELD, the regular program, and the French immersion program started coming, and we all found a level playing field and the *bonhomie* of the dining table.

Through a grant from a grocery store and the help of Growing up Organic, we installed four raised garden beds. Over the years we installed five more, plus edible bushes, maple trees and a friendship bench. These additions have transformed our front lawn, drawing neighbours to come stroll, look, sit, weed, and taste, where before there was just lawn. Parents waiting to pick up students began to sit on the bench and conversations were started. The gardens offered excuses for socializing and sharing. We have all learned so much about the plant world from the four corners of the globe, beyond our curriculum of organic companion gardening. Personally, it taught me about trying to create authentically inviting spaces.

Parents of students I taught six years ago still stop me to tell me that their child continues to cook the recipe they learned, and experiments with food at home and with friends. Joy and skill in gardening, food and cooking are not just good life skills, but are life-giving acts of creativity, nurturing, meditation, and love.

As all classes take part in the gardens and various cooking activities over the course of the year it becomes a part of the school culture, something kids can talk about, something that connects to environmental curriculum, math, social justice and art, something that connects us to one another. Recently, we had the opportunity to partake in an initiative to bring indoor garden towers to our school. Through the environmental club's participation in Ecoschools and collaboration with the school board's environmental education coach, the aptly named

Tom Thistle, we were given two indoor gardening contraptions. They have enhanced our learning and dialogue about food security in Canada and brought a wealth of fun and deliciousness.

The following is an excerpt from Catherine O'Brien's Deep Table Blog, a reflection, by Tanya O'Brien on "Salad Day" at Featherston:

> *I love my school! This week was a perfect example of one of the many things that make our building the happy place that it is. David, chef turned teacher, is a man on a mission to bring food and learning together into one big tasty dish for all to share. Students and staff have all benefited from his ideas, energy, and love of people and food.*
>
> *While we have had garden boxes outside for a few years, this year David was able to help get a school grant for vertical gardens, making learning through the growth of fresh food a year-round experience. So as the outdoor boxes are covered in snow and ice makes the play yard into a rink, inside the smell of basil and fresh lettuce greets us as we learn.*
>
> *Students are taught how to grow, how to harvest and clean their crop, how we taste, what emulsification is, ratios in recipes and how we decide if something tastes balanced. Genuine excitement and engagement in learning are the best of what you look for.*
>
> *Teachers and students from a variety of classes made their way in and out of the classroom that had been transformed into a workspace to make vinaigrettes. It was amazing to have students grab my hand in the hall and offer me a piece of manhandled lettuce, inviting me to come in and taste their dressing.*
>
> *The day before, one student told me that she had never eaten basil, but that, "tomorrow I am going to try it." I asked an eight-year-old what was going on and without hesitation, he told me that if you make a salad dressing, "you just need a ratio of oil and vinegar and then you go to the table and you start mixing and trying the things." At the tables were a variety of ingredients that students were adding and mixing with thoughtfulness and surprising discernment.*
>
> *Spices, herbs, lemons, garlic, hot sauce decorated the tables, carefully labeled for students new to Canada learning new vocabulary. They tasted and tried and recorded their findings. They were encouraged to taste test and vote on a favourite. David noted that many of the dressings reflected the cultures from which the students come from. Many of our Middle Eastern students chose lemon bases and our Somali students chose spicy ones. The ones I tasted were delicious! I ended on a spicy note, enjoying the bite as I moved on to my next class.*
>
> *On Friday afternoon David was in his room sweeping lettuce bits up off the floor, calm and content with a job well done. His next big plan is to see if he can teach the students the basics of simple marketing by making some dressings having the students produce and sell small jars.*
>
> *Look out Paul Newman! We are coming for you! Genuine excitement! Engagement in learning!*

Our Friends in the Autism Program - David Coyne and Tanya O'Brien

An integral part of our community is the fact that we are home to four congregated Autism classes. Each class has six students, and three staff and the classrooms are spotted throughout the school. This program for high needs students has actually been a catalyst to

promote our sense of community and learning opportunities for all students and teachers. Flexibility and fairness are key attributes in our school. We emphasize that fairness does not always mean that everybody gets an equal portion; fairness means that everybody gets what they need. This means that sometimes it's loud. It means that sometimes we wait. It means that sometimes we are working with somebody who might need more help. It means that we need to make sure we close the gate on the play structure and let others go first. Integration of some autistic students happens daily into the regular program and partnerships in these rooms are strong amongst students. We could list so many extraordinary moments that our inclusive environment has fostered but by far the most beautiful by-product is a spirit of family and empathy that comes from developing caring relationships. There is an understanding that develops with exposure, with teaching, with conversations and with opportunity. Students discover that the more you know and understand about someone who seems different from you, the less you fear.

Our connections to each other through this program are likely what contributes most to our sense of understanding. Staff regularly help one another, sometimes through a detailed plan and sometimes in a moment's notice based on where you happen to be in the building and whether or not you can run fast. Connections to caring adults are vital to students, whether you have autism or not. The fact that so many staff know so many children by name and personality adds to the sense of community and we are all better as a school because of this program.

A snapshot of us as a Living School could be a recent situation observed by a staff member on yard duty. At recess time, the autism spectrum disorder students who can manage are encouraged to play and be in the larger schoolyard with regular teacher supervision. One student who struggles with his emotions and making connections can often be heard screaming and crying when his anxiety rises. Recess can be stressful for him. Most times, with some coaching, he can self-regulate and calm himself; other days it is much harder.

One day there was a very big upset. This student was loudly screaming, "I hate my life." In seconds many other students came running to get teacher help which could be heard by staff on our radios from all different parts of the yard. Before any of the adults could get there, we noticed two grade eight boys flanked each side of this student as he screamed and cried. They told the others to stay back and mentioned to the approaching teacher that "he's our reading buddy." We stayed back and for the duration of the 30 minutes of recess, those boys demonstrated what it truly meant to be a friend, minus an adult telling them what to do, using techniques they had observed and successfully helped calm him enough to see that things weren't so bad.

Another student with autism in the program runs our recycling program. He is passionate about doing this job with care and precision. He is a daily fixture in rooms, sometimes twice a day, making sure that the job is done correctly. All of the students in the school know him, and because of his dedication and suggestions, they are more careful when it comes to recycling. Through this program he has made significant gains. His passion for the environment is his connection to the school at large.

Ironically, the connections that we value link back again to a garden. In a part of the yard that leads to specialized transportation lies the Cathy Nevins Butterfly Garden, planted in memory of a former principal, a leader who championed a philosophy that aligns with a Living School. The garden was planted as a way of making that area of the school more inviting and to provide a space for gardening skills for students with autism. The plants were specifically chosen to attract butterflies, symbolizing the idea that the beat of a butterfly wing could make a change around the world.

Gardens require care and attention to be all that they are intended to be. The mom of our recycling friend noticed the beauty of the garden and realized that help was needed. She took this on as a project and met with the original landscaper and designer. Both two special women, with special children who realized that the garden was more than a garden. The garden has been lovingly maintained this year and the planting with students has continued. To the friends of Mrs. Nevins, this is not just about the plants; this is about a friend and all that she meant to our school. When we said our thank you to our parent volunteer on the last day of school, exhausted by the rush of June, her gracious and most beautiful reply was "it is my honour to take care of this garden for your friend." We were promised that for as long as her boy was at our school, that this garden would be taken care of.

Featherston Staff Responses

Once we received the invitation to contribute to this book, we started asking staff what they thought about our workspace. They shared their observations on what they do in their practice and daily lives that helps contribute to Featherston being a Living School. They also shared ideas regarding what we could do to enshrine and protect what we have collectively created. They described some challenges that could be tackled, and even began addressing some of them.

Featherston teachers believe that we are a Living School. Through many examples, reflections and discussions they all came to the same conclusion that what makes our school special is the quality of relationships that we have created and how this philosophy of care reaches out to new staff when they arrive. Teachers believe that people care for them. There is a sense of community where people know your life outside of work and "have your back" and that people are "kinder here." Many noted that while we are all different, we all seem to care for issues that are present in the world or environment and want to empower students to see many points of view through class lessons and extra-curricular activities.

Most staff reported that they are have teaching assignments that suit their strengths and interests, and this makes them happy. They feel that they can be experts in their area and that people are willing to trade classes, work in teams or give ideas to solve problems and to make learning experiences better for students. They likened it to a family of sorts. Teachers reported that they felt that their students were well looked after by other teachers. It is very common for many adults to take a collective interest in students and that problems are solved and victories celebrated together.

When we asked the teaching staff what they did in their daily practice that promotes a Living School and contributes to their happiness, they provided these words:

- Listen
- Engage
- Collaborate
- Ask
- Communicate
- Smile
- Relationships
- Compassion
- Empathy
- Action
- Connect
- Support
- Celebrate

Conflict and Evolution

Featherston Dr. PS did not explicitly strive to be a Living School. Once we realized that we possess many of the Living School attributes and practices we also felt compelled to explore what we have learned from our challenges and how we want to continue to evolve. Life without conflict is not life. Our school is no exception. We accept the understanding that we are human and that we make mistakes. At times, there will be complications and frustrations, but compared to other schools, the staff told us that "people focus on the solutions and not so much the problem." Teaching is a challenge and some days are better than others. We occasionally get angry and annoyed, but the feeling usually passes quickly. People said they usually had one good friend at school who provided a safe place to communicate their needs and concerns, once again outlining that in the end, the quality of relationships is integral to being happy.

Nevertheless, not everyone always agrees with the Principal's philosophies and approach. There are times when there are disagreements and challenges. Educational Assistants (EAs) who are large in number in our building are paid less, and sometimes feel unheard in the community of the school. Disagreements do happen yet these conflicts remain civil. They do not spiral out of control or divide the school. Staff support each other. Administration and staff commented that when problems or conflict arise, people are respectful of the process of resolution. If the process does not directly involve you, people choose to stay out of it. There seems to be recognition of boundaries and the difference between being a problem solver or exacerbating problems.

When the staff and Principal discussed the results of the support staff and students' surveys, something became clear. We learned that something as benign as a schedule difference was leading to a disconnect between levels of staff. We realized that EA's had a different timetable than teachers, which led to their exclusion from Staff Meetings where our ideas and opinions are expressed and plans made. Once this was noted, the EA schedules for the next year were shifted so that they could more easily attend the staff meetings. It is hopeful that this will foster an opportunity to work more collaboratively on our school vision.

How Do We Preserve Our Living School?

Through the process of codifying why and how we are a Living School, as a staff, we have created a document of our practice and beliefs which we have shared with our incoming Principal. There is an opportunity to use this information to contribute to our school's health and wellness plan. The process we used and questions we formulated created an avenue for communication about relationships and happiness in our school that we can use moving forward. We used the Living Schools Discussion chart to formulate questions and guide discussion. We will continue to use it to help observe and inspire our practice.

Courageous conversations require us to be brave and sometimes address issues in order to bring about a change. This is a next step. It is not easy confronting conflict together. We think we can be better at this. We believe courageous conversations are essential to a Living School because you cannot invest in relationships and take the necessary risk to share and progress if you do not feel safe and valued.

Many people here are leaders in their own ways in corners of the school, doing quiet, amazing things each day. Those "leaders" encourage others and lead by example. Leadership presents in many untraditional ways and we need to make sure we look for it and protect and provide opportunities for various forms of leadership.

Administration is critical and requires a person that sees strength and potential in staff. This takes time and personal interest to find out what our passions are and to support the passions within reasonable parameters.

Conclusion

Relationships. We have collectively determined that it all comes down to this. In our curriculum, we teach the interconnectedness of all things on earth—from individual to individual, species to species, and ecosystem to ecosystem; every living thing is connected and affects each other. We must also model it in our interactions with each other, our community and our earth.

The process of figuring out what defines us and guides our practice has allowed us to be honest and reflective as a school community. We are not without our challenges and are not immune to the stress and challenges of teaching. We came to the conclusion that to be a Living

School all comes down to the fact that *we are a group that values and invests in positive relationships with others and with the earth.*

Editors' Note

Featherston Drive Public School has a new principal this year, Brian Chiasson, and we asked him to share his experience of becoming an administrator in a school where the staff were actively engaged with a focus on Living Schools. Here is his response!

Editors: What does it feel like to be an administrator in a school where the staff have already explored how the school aligns with the Living Schools attributes and practices and some steps that they want to take to sustain the aspects that help everyone to thrive?

Brian Chiasson: Joining the Featherston Drive Public School family this past September was a whirlwind experience for me. I was embarking on a journey—one with a new job title, a new school, and lots of new responsibilities. Although I was beyond excited and ready for the challenge, I really didn't know what to expect moving forward. In May of 2018, shortly after the news of my transfer came out, a teacher by the name of Tanya O'Brien reached out to me via email. She was a member of the Featherston Drive PS, and simply wanted to extend a heartfelt welcome as well as offer assistance. At that exact moment, I knew this school was a special place. I must admit I had never heard of a "living school" before, but the very foundations of the term were already becoming quite clear to me. Come September, it did not take me long to figure out that happiness and well-being were ingrained in everyone that walked through our doors.

To suddenly be immersed in a school setting where sustainable happiness is a major focus continues to be a blessing. I see a plethora of multiculturally diverse students demonstrate genuine kindness towards their peers when they are upset. I see students of all ages treat their peers from all four of our autism units with the utmost respect. Even in times of conflict, students are able to show empathy towards others, in part because their teachers take the time to practice collaborative problem-solving with them. I see active student and staff participation in impactful initiatives such as the Environmental Club, Cooking Club, Hackergals and Shannen's Dream. These extra-curricular opportunities make explicit connections with current global awareness issues, and consequently enable our students to make responsible choices and decisions affecting the larger-scale population.

Some of the staff members here at Featherston are tackling SDGs [Sustainable Development Goals] and the Living Schools philosophy head-on. I had the pleasure of walking into a classroom to watch a group of students read a book about a young, industrious girl who is forced into a life of indentured servitude in a poor Pakistani village. The character soon uncovers a world of unjust power dynamics, gender inequities and unfair labor practices after being thrown into a situation beyond her control. The empathy demonstrated by our students was a powerful thing to witness. They were able to communicate their strong feelings about

the novel's social justice issues with students from Panama reading the same story (via the Padlet app). This authentic learning experience provided them the opportunity to be effective communicators, as well as digitally fluent and globally aware.

As a leader, I can't help but have a long-term vision for our school. This vision, however, is constantly being polished as I walk through our vibrant halls and observe what is happening around me. I am still trying to get a firm grasp on my own definition of a living school, and how it meshes with what's already established here. I do believe it is our responsibility as educators to promote such an important philosophy, which blends in perfectly with our School Learning Plan for Student Well-Being. For this plan, we have decided to focus on developing a healthy sense of self and belonging in our students. If we can help them accomplish this by providing the right tools and strategies, it is our hope that they will be keen to be contributing members of a community—a community that understands the impact daily decisions can make on the rest of the world.

Chapter 9

Edible Education

SEAN O'BRIEN MURRAY

The whole of nature is a conjugation of the verb to eat, in the active and passive.
William Ralph Inge (in Pollan, 2016, p. 6)

A flurry of excitement and support to reform education with environmental sustainability in mind has been increasingly prevalent within both the public consciousness and academic circles. And while eco-conscious projects and events have become the norm at many public schools, this chapter will focus on a new wave of sustainable food education: *edible education*. Alice Waters, the founder of the Edible Schoolyard Project, coined the term edible education to describe an educational model that grows ecological awareness by integrating a relationship to food and to the natural world into the fabric of a school's culture and curriculum. In essence, edible education prioritizes our relationship to food as a thread throughout the entire curriculum, potentially more extensively than enacting a 'green program' or implementing a healthy lunch program. Waters sees edible education as "a larger and more radical approach to teaching our kids how to live and trust their deeper selves and how to embrace Slow Food culture"[1] (Waters, 2012, para 21).

Examples of edible education and place-based learning will be reviewed within this chapter. The case studies will range from programs in their infancy to veteran programs within public K-12 education.

[1] *Slow Food* is a global, grassroots organization, founded in 1989 to fight the disappearance of local food traditions and the spread of fast food culture. Over the last three decades, Slow Food has evolved into a global movement that involves millions of people in over 160 countries, working to ensure that everyone can have access to good, clean and fair food: good, meaning healthy as well as delicious; clean, meaning produced with a low environmental impact and with care for animal welfare; and fair, meaning produced with respect for the people who make, process, and sell it. (Slow Food, 2015)

(see http://creativecommons.org/licenses/)

C. O'Brien & P. Howard (Eds.). (2020). *Living schools: Transforming education* (pp. 119-126). Winnipeg, MB: ESWB Press. ISBN 978-0-9939534-2-2. Retrievable from www.ESWB-Press.org

Defining Sustainability

Before entering into a discussion on shifting towards a culture of sustainability in education we should first unpack how 'sustainability' is regarded colloquially and within academic rhetoric. To some the term may already be relegated to a graveyard of eco-buzz words that paradoxically can mean both anything and nothing simultaneously. However, to others the term may hold a monotonous connotation and invoke a sense of drudgery and maintaining the status quo, for better or worse. On this subject Michael Pollan (2008) famously wrote "When pesticide makers and genetic engineers cloak themselves in the term, you have to wonder if we haven't succeeded in defining sustainability down" (para. 1). Pollan continued, describing the term *sustainability* as being "in danger of slipping away into a sea of inoffensiveness" (para. 1).

The term's fluid definition allows it to take on whatever meaning suits the user or context. Alan Atkisson, co-founder of the Sustainable Seattle initiative, asserted after reviewing the influx of sustainability definitions, that "as a name for the future of our dreams, sustainability may be 'the worst word, except for all the others'" (in Stone, & Barlow, 2009, p. 2). In relation to edible education, Waters said that "in my field when we see a new term that works like 'sustainability,' it gets grabbed by the fast food culture and it gets used everywhere, indiscriminately. And, in no time the term becomes misleading, cloudy and meaningless" (Berkley University, 2017).

System theorist, physicist and Director of the Center for Ecoliteracy, Fritjof Capra, writes about sustainability in terms of an interconnected system. Capra describes what it means to live sustainably: "It means recognizing that we are an inseparable part of the web of life, of human and nonhuman communities, and that enhancing the dignity and sustainability of any one of them will enhance all the others" (Capra & Luisi, 2014, p. 371).

Capra's vibrant vision for a sustainable community is a stark contrast to the monotonous or meaningless definitions sustainability sometimes invokes. When pairing sustainability with K-12 education, a perceived sense of stale repetition is counter-intuitive to cultivating a thriving classroom with passionate students and teachers. As you read through this chapter's case studies you will likely notice that a pattern starts to present itself. When a school becomes a sustainable community, lessons are not contained by the curriculum but are bursting to be discovered through interactions with other students, staff, and the natural world. In essence, when a school becomes a sustainable community it is not stagnant but alive. The very term, Living School, captures this philosophy.

O'Brien and Howard (Chapter 1, this Volume) pinned down the illusive term as "the view that we must live equitably within the resource capacity of our planet and with respect for the 'other than human' inhabitants" (p. 3). I would add that an ethos of sustainability can be understood as: *striving for a flourishing and balanced environment for all.*

Rationale for Edible Education

Anthelme Brillat-Savarin famously wrote over two-hundred years ago, "the destiny of nations depends upon the manner in which they feed themselves" (cited by Waters, in Berkeley University, 2017). Waters remarked, after quoting Brillat-Savarin, that if he was alive today he would likely revise his statement to, "The destiny of *our world* depends upon the manner in which we feed ourselves" (Berkeley University, 2017, 30:30). Our relationship to food is as not a siloed issue but interconnected with many of the global issues we face in terms of health, economy and climate change. The EAT-Lancet Commission is comprised of 37 world-leading scientists from 16 countries with the goal of reaching a scientific consensus on a global sustainable diet. The 2019 report released by the commission called food "the single strongest lever to optimize human health and environmental sustainability on Earth" (Willett et al., 2019, p .5). The report predicted that without addressing the global diet, one that would be more plant-based than the current norm, the next generation will increasingly suffer from malnutrition and preventable disease. Furthermore, the report stated that without an urgent and radical transformation of the global food system, the world risks failing to meet the UN Sustainable Development Goals (SDGs) and the Paris Agreement.

During a meeting at the NASA Goddard Institute for Space Studies, head of the Climate Impacts Group, Dr. Cynthia Rosenzweig, presented on the effect climate change is having on agriculture. Rosenzweig spoke about droughts leading to crop loss, soils ruined by salt accumulation, flooding that left soil waterlogged, longer growing seasons bringing new and more pests, and erratic weather shifting harvest seasons. Rosenzweig concluded "it was all projections before; it's not projections anymore; it's observational science" (cited in Lappé, 2011, p. xvii).

Accounts of such devastation to our planet can leave us with the feeling that our eco-conscious acts are insignificant and our home is beyond repair. Perhaps what is most exciting about edible education is that it inverts the narrative of climate change. Instead of looking at the impact climate change has on our food system, we ask how our food system can heal the planet.

Environmentalists, conservationists, scientists, and journalists have steadily been rewriting the classic doom and gloom narrative of climate change to one of hope and action with food playing an essential role. In 2008, Pollan wrote an opinion piece in the New York Times entitled "Why Bother?" In the article, Pollan countered the 'drop in the bucket' perspective to eco-action with a rallying call to change our relationship with food:

> The act I want to talk about is growing some—even just a little—of your own food. Rip out your lawn, if you have one, and if you don't—if you live in a high-rise, or have a yard shrouded in shade—look into getting a plot in a community garden. Measured against the Problem We Face, planting a garden sounds pretty benign, I know, but in fact it's one of the most powerful things an individual can do—to reduce your carbon footprint, sure, but more important, to reduce your sense of dependence and dividedness: to change the cheap-energy mind. (para. 20)

Pollan (2008) continued by citing pioneering environmental activist, Wendell Berry, who made the case over 30 years ago that growing food is "one of those solutions that, instead of begetting a new set of problems—the way 'solutions' like ethanol or nuclear power inevitably do—actually beget other solutions, and not only of the kind that save carbon" (para. 22).

Lappé (2011) furthers Pollan and Berry's solution-focused rhetoric in *Diet for a Hot Planet*, making the case that when we invert the climate change–agriculture narrative then the people who cultivate food "are no longer 'a problem to be solved' but among our great, untapped resources in the fight against climate change" (p. xx).

Introduction to Edible Education

Edible education is more than just growing food or an education on agriculture systems. In Chapter 3 (this volume), O'Brien and Howard wrote about The Riverview High *Human Project*. The Riverview teachers asked their students the goliath question "*What does it mean to be human?*" The Business class students answered this timeless philosophical query by "our most human concern," our relationship to food. The young students of *Riverview* used the universal relationship all humans have with food as a foothold to debate this profound question. Incidentally, *The Riverview* Business class participated in edible education.

Waters (2009) provides another example of *what* edible education looks like in practice within public K-12 education and demonstrates how a culture of sustainability can emerge:

> It means math becomes a practical, hands-on class taught in the environment of the farm and garden. A language class is enhanced by the translation of recipes or stories from other cultures. A biology class is illuminated by the activity in a compost heap or by studying and observing living animals and their habits. All classes are embedded in real, evolving, living environments. Things like biodiversity and interconnectedness and empathy are experienced instead of just talked about. (p.18)

The Martin Luther King, Jr. Middle School, Berkeley, California serves as the Edible Schoolyard Project's primary case study. During the three years at the Martin Luther King, Jr. Middle School sixth, seventh, and eighth graders experience 60 classes in the Edible Schoolyard program.

> Our teaching staff designs our lessons in close collaboration with King Middle School's science and humanities teachers. This helps us make intentional academic connections that allow a student's full learning experience at school to become more relevant and engaging…. In the Edible Schoolyard, students are farmers, cooks, learners, and teachers. In the kitchen classroom, our chef teachers are guides to the exploration of how culture and identity shape our personal relationship and access to food. Students, teachers, and community volunteers gather around the

> table to share meals and conversation. (The Edible Schoolyard Project, 2020, para. 5)

The principles of edible education are often represented in school initiatives under various titles. To name a few, the Canadian organization, *Little Green Thumbs* describes itself as an indoor garden classroom. The indoor gardens act as living laboratories for students to foster skills such as critical thinking, communication, collaboration, and creativity while also learning and applying real-world STEM skills (Little Green Thumbs, 2019). *The National Farm to School Network* is an American information, advocacy and networking hub for communities that works to bring local food sources, gardens and agriculture education into schools (National Farm to School Network, 2019). *Farm to Cafeteria Canada* (F2CC) is an organization whose vision is "vibrant and sustainable regional food systems that support the health of people place and planet" (Farm to Cafeteria Canada, 2019). F2CC works with partners across Canada to educate, build capacity, strengthen partnerships, and influence policy to bring local, healthy, and sustainable foods into all public institutions (Farm to Cafeteria Canada, 2019). *Big Green* works with schools in the United States to create learning gardens which act as dynamic outdoor classrooms and edible gardens (Big Green, 2019).

Place-Based Education

While place-based education doesn't specifically focus on food, edible education often embodies the principles of place-based learning. Place-based education is the process of using the local community and environment as a teaching tool by emphasizing experimental, hands-on, real-world learning. In practice, place-based learning can take on an almost *Magic School Bus*[2] approach to education as students are immersed in local heritage, cultures and landscapes, using these as a foundation for studying subjects across the curriculum. For example, a biology teacher might use a backyard pond for a lesson on eco-systems or an economics teacher may use data from local shops.

Place-based education can also be synonymous with passion-based learning (Maiers, 2010) because students feel invested in the learning process and take pride in the outcome. Students engage with the curriculum in a way that meets their needs and perhaps more importantly, understand the relevance that the lesson has on their lives and community. The community, in turn, benefits from the increase of active engagement by local citizens and increased ecological action (Sobel, 2005).

David Sobel (2005), author of *Place-based Education, Connecting Classrooms and Communities*, described his experience with recognizing a need for place-based education when he started to become interested in plant taxonomy. Sobel was in his tenth-grade biology classroom when he noticed an oversized model of a flower on the lab table. To his astonishment, he recognized the model as a flower that was growing just outside the classroom door.

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[2] An educational Canadian-American children's TV show that aired in the 1990s.

> As a high school biology student, my unquestioned misconception was that this was a model of a rainforest flower, or at least a far-away flower. It never occurred to me that real flowers, with real flower parts, existed on the school playground. (p. 5)

While there are many examples of edible education intersecting with place-based education, a particularly heartwarming account comes from Burlington, Vermont. Burlington is one of several towns in the United States that is serving as a resettlement site for Somali Bantu refugees. Angela McGregor, an educator with Shelburne Farms' Sustainable Schools Project, was working with the first graders in Julie Benz's class at Lawrence Barnes Elementary as part of a six-week unit entitled *Food Cycles in Our Community*. During one of the lessons the students were learning about the anatomy of chickens and how they are used in the food system. While the students were settled at their desks drawing diagrams of chickens Angela snuck out of the classroom and down the hall to the teacher's lounge, where she was hiding a special guest—a chicken from a local farm, known as Speedy. Angela had planned to take the chicken around the classroom and let the students touch it and apply what they had been learning.

When she returned to the classroom with Speedy she was astonished by how the Somali Bantu students' eyes lit up. To the Bantu students seeing this chicken was like seeing an old friend. The Bantu students immediately started sharing stories, one Bantu boy spoke of how Speedy reminded him of the chickens, in the refugee camps, for which he was responsible. Another talked about how Speedy was different from the chickens in Africa, who would sometimes be eaten by lions. The other children and Angela were captivated, as these sometimes-timid newcomers began to speak about their lives in Africa.

Speedy incidentally became a way to connect with students who were not previously united by language or shared experiences. The author of *Chickens in the Classroom* recalled "as the Bantu children showcased their knowledge to the other students, a palpable sense of pride and awe filled the room" (Promise of Place, 2019).

The chickens in the classroom case study illustrated an exciting meeting point between edible education and place-based learning as food offers incredible opportunities for connection as a universal expression of cultural identity and history. The local chicken created the opportunity for the Bantu students to feel validated and celebrated while sharing their experiences with a food source they are intimately acquainted with.

Conclusion

Teachers all too often hear students ask, "What's the point?" Pollan's "Why bother?" in many ways feels like a natural evolution of this classroom question. The inquirer to both questions can't find the meaning or purpose in action being asked of them. The questions themselves are not inherently wrong; however, the case studies explored in this chapter show the capacity education has for answering these questions before they are even asked. It feels

impossible to imagine, given the energy described in the account of chickens in the classroom that a single student asked, "What's the point?" These students are the future policy-makers, educators and consumers, hopefully, as adults they won't be asking "Why bother?" and instead will be helping to cultivate *well-being for all.*

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Chapter 10

Homeschool as a Living School

TERRY GIBBS, MORGAN GIBBS LEECH, OWEN GIBBS LEECH, & GARRY LEECH

On a recent windy Cape Breton morning, Terry was heading to the local CBC radio station to be interviewed about climate change on the program "Mainstreet." In a 2018 report from the United Nations Intergovernmental Panel on Climate Change (IPCC), climate scientists from around the world were warning that we only have a dozen years or so to turn this thing around in order to avoid catastrophe; specifically, they mentioned that this is the minimum amount of time we have in which to act substantively to keep global temperature averages from rising past 1.5 degrees C. Terry knew in advance that the key question she was going to have to address on the show was how individuals can feel empowered to confront climate change when it can feel so insurmountable and part of such huge and seemingly impenetrable political and social systems.

Terry could not help but think about a conversation she had just had with her 12-year-old son, Owen. That morning in homeschool, Owen, at his own initiative, had been researching the scientific theory of emergence, something Terry had not heard about before and was immediately fascinated by. The basic idea is how, throughout the universe, small things group together to become large things greater than the sum of their parts to embody more capacity and, in some cases, it would seem, more wisdom. Emergence points to the fact that many things existing together under a set of rules can and do create something above and beyond themselves.

Terry's discussion with Owen about the theory of emergence allowed her to reflect on climate change through this lens. Acknowledging a coming together of all of us from the very unique places we find ourselves as parents, carpenters, educators, lawyers and so on to create webs and collaborations of knowledge and action to build a more sustainable world. This theory reinforced Terry's belief that the solutions are not 'out there' but rather are right in front of us in our daily activities and practices, and in the connections we make with others through those practices. This interaction between Terry and Owen is just one example of how in homeschool the learning goes in many directions, educating both parents and children inside the home and outside and making linkages with the natural world.

When we were asked to contribute a chapter about our experience as a family with homeschool as an example of a 'Living School,' we were not exactly sure at first what that

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C. O'Brien & P. Howard (Eds.). (2020). *Living schools: Transforming education* (pp. 127-137). Winnipeg, MB: ESWB Press. ISBN 978-0-9939534-2-2. Retrievable from www.ESWB-Press.org

meant. Terry had some familiarity with the concept from her collaborations and friendship with Catherine O'Brien but had not thought of applying the idea to homeschool. What we discovered as we began to unpack the attributes and practices of Living Schools was that we were already practicing, in our own unique way, pretty much all of the principles in our homeschool setting. In fact, it was Owen and our youngest son, Morgan, who proudly ticked all the boxes from the "Leadership" column of the Living Schools Attributes and Practices chart (Howard & O'Brien, 2018) given to us by Catherine. We then discussed each attribute as the boys and their friend and neighbour Sadie, who is homeschooled with the boys, told their story of homeschool.

Homeschooling had not been on our radar as a family. Terry was a full-time professor at Cape Breton University and Garry was teaching courses part-time while also working as an independent journalist, primarily in Colombia. It was not until Owen began to struggle in kindergarten that we seriously considered the homeschool option. Owen seemed depressed, and his teacher said he had difficulty focusing and was struggling to learn to read and write. Her way of addressing this issue was to single him out and make him sit front and centre every day. Owen quickly grew to detest school, so we discussed some options.

The first option was private school, the local Montessori, but we are both supporters of public education and were opposed to the two-tier education reinforced by private schools, not to mention their expense. Garry suggested another option, that he homeschool Owen. Garry could identify with Owen because he had also hated school and struggled with the rigidity of it. He ultimately graduated as a C minus student. So, we decided to try out homeschooling and see how it worked for Owen and for Garry.

As Garry points out, "Prior to homeschooling I could think of nothing worse than teaching five- and six-year-olds basic reading, writing and math. But to my surprise, I love teaching homeschool. I find it incredibly fulfilling." So, while our initial reason for homeschooling was not political, we immediately recognized the educational potential with regard to providing Owen with a much greater diversity of perspectives on the world than the mainstream views that dominate the school curriculum. We also saw that it would give us the freedom to engage in different pedagogical approaches from those that dominate traditional classrooms.

It is clear to us now how from the very first day of homeschool, things began to shift both in terms of Owen's existential experience as a learner and in terms of the 'content' of his learning. As explained by O'Brien and Howard in Chapter One in their characterization of Living Schools, we soon discovered how our homeschool would be a place "where people are flourishing, where staff and students are on a co-learning journey, and there is explicit awareness that schools are interconnected with local and global communities, including the natural world." In order to 'flourish,' children need to be seen and teachers need to reflect on and respond creatively to the unique personalities and capabilities of their students.

For us, education is about allowing children to reach their full potential, a goal which presupposes creative and multi-faceted styles of pedagogy and evaluation, an expansive environment where there is plenty of room to make mistakes, and where children are able to actively participate in decision-making around various aspects of their education. We also

believe it is critical that our educational approaches lead to the development of global citizens knowledgeable about the real challenges we face in the 21st century and who feel empowered to bring their unique talents and knowledge to building a more compassionate and sustainable world.

In terms of promoting *well-being for all*, we have found that the benefits of homeschooling, with what we may now in retrospect call a Living Schools approach, are immense in this regard. It is our belief that when education is working, children are learning about caring for one another and building resilient and inclusive communities. As Terry notes, "Traditionally, schools have tended to focus on the acquisition of academic knowledge and skills while paying little attention to the development of emotional intelligence or social bonding. When we look at global problems of poverty, inequality, racism, homophobia, cruelty to animals, or climate change, it becomes clear that whether it is in the sandbox or in the United Nations, empathy, compassion and cross-cultural and cross-species understanding are as critical as the traditional skills gained in math, reading and writing."

In our situation, Garry has been the primary homeschool teacher educating not only our own two boys, but also Sadie. Terry has periodically led 'special topics' homeschool days on everything from meditation to Vandana Shiva's concept of 'Earth Democracy.' The children have also been fortunate to have our good friend and neighbour, Amber Buchanan, involved in their education, as she focused on building communication skills and spent considerable time on nature education. Amber was an active participant in teaching homeschool taking on one or two days a week for two and a half years during the time she and Sadie were our neighbours. In acknowledgement of her very unique and wonderful contributions to our children's and our learning, we have tried to thread some of her ideas into the story we share here.

In preparing to write this chapter, Terry interviewed all of our family members, as well as Amber and Sadie, asking them to reflect on how their experiences with homeschool may reflect some of the Living Schools attributes and practices. Broadly speaking, these include values promoting engagement with the world and cross-cultural understanding; voice and agency for students and teachers; holistic pedagogical practices rooted in dialogue and geared towards inclusion and sustainability; the development of 'ecological literacy' and practices that foster the emotional, physical and spiritual well-being of teachers and students. For us, a Living School is one in which the students are engaged, empowered and fully present for their education. Also, in our case, it has been a 'family' affair. So, when it came to writing this chapter, we decided that the four of us should write it together with input from Amber and Sadie.

A Living Homeschool

The first thing Garry discovered in homeschool is that if he made Owen sit for hours on end, he did indeed have trouble focusing, but when he was allowed to walk around, he had an incredible capacity to listen and focus. Owen's legs had to be moving whenever his mouth was.

He would walk and climb all over the living room furniture while verbalizing some point or another and as soon as he stopped talking, he would sit down. As long as Owen had this freedom of movement his capacity to focus was immense. As the years passed, his need to be moving diminished and his ability to focus while sitting down grew. Owen loves homeschool and has never had a desire to return to the school system.

One year after Owen began homeschool, Morgan reached school age. We decided that he should follow the same trajectory as Owen by attending kindergarten for a year and then he could choose to continue or to be homeschooled with his brother. He chose the latter. Each year they have the option to re-enter the school system. Owen is now 12 years-old (Grade 7) and Morgan 10 years-old (Grade 5) and neither has yet chosen to return to school. At a very basic level, homeschool has provided Garry with quality one-on-one time with the children without any distractions and it has been rewarding for him to play such a prominent role in their educational development.

There are many different approaches to homeschooling. Some parents who homeschool choose to follow the provincial curriculum, so the child is getting the same education as children in school. Others use prepackaged online curricula that are available for purchase. And the curriculum for some is influenced by their particular religious beliefs. Unschooling is another homeschool approach in which there are no particular requirements with children learning by engaging in everyday life activities. Our approach is probably somewhat unique in that it is a completely self-devised curriculum that is constantly evolving and changing and in which the boys have a major voice. In reference to our flexible approach, Garry explains, "I would much prefer the boys run with something they're curious about in that moment rather than force them to learn something they're not particularly interested in right then just because it's on a curriculum and it's time to study it. For example, one day the kids asked about slavery, so we shifted our plans for the morning and focused on that topic for two hours."

Owen and Morgan homeschool from 9:00am until 12:30pm with a 15-minute recess that occurs when they decide. While their day is shorter than that in the school system, their schooling requires constant and intense focus and engagement. There is no sitting around waiting for the teacher to tell them what to do next; they automatically move on to their next topic. They are constantly focused, engaged and problem-solving. In the first few years we had more structure with the boys spending 30 minutes on each basic topic—reading, writing and math—during the first half of each homeschool day. And then, after a 15-minute recess, we would look at current events, history, geography and nature among other things. As the boys became competent readers and writers, the curriculum became more flexible. By the time Owen was 9 and Morgan 7, we decided that at the beginning of each September, we'd sit down and collectively determine how things would work for the upcoming school year.

The following year, Owen and Morgan decided they wanted more control over what they did, both in terms of scheduling and content. Our homeschool approach has from the beginning involved empowering our children to express themselves fully and to be part of a democratic decision-making environment where there is an openness and responsiveness to changing needs and interests. So, we developed a system where there would be a list of topics that they had to cover in a week and determined how much time they had to spend on them.

For instance, each topic would be done in 30-minute sessions: reading, math, writing, science, history and music three days a week, and Spanish five days a week. This took up about half of their homeschooling time, the remainder of the time they were free to do whatever they wanted as long as it was educational.

They were also free to choose which days and when they did their required topics. This gave them a lot of control and ownership over each day. They could decide each morning: What do I feel like doing today? And when do I feel like doing it? Garry would engage with them on a lot of the topics through discussion and by using various online tools such as IXL Learning for Math and English Grammar, the Khan Academy for science, Duolingo for Spanish, and DanceMat Typing for learning to touch type. We have also made good use of the local library. We discovered that when the boys had input into scheduling, they enjoyed their least favorite activities much more. And related to this, when asked why he preferred homeschool, Morgan replied, "I feel like I have more control in homeschool because you can choose what you want to do where in regular school you just do what the teacher tells you to do." Sadie noted that since being back at regular school she sometimes has to run laps in gym directly after lunch, "I get cramps and you're not allowed to stop." She says she preferred to do Just Dance at homeschool because "it's fun and really good exercise. I got to do it when I needed exercise and when I was jumpy." She added, "You also get a choice to eat when you want to (in homeschool). At school you have to wait a long time for lunch even if you're starving, then I can't stop looking at the clock. All I can think about is food and I can't focus if I'm hungry."

As the years have passed homeschool has become increasingly flexible and open to the input of the kids. Owen and Morgan have become very self-directed in their learning. Garry's daily involvement has decreased over the past couple of years as they have taken on more responsibility for their own education and they have relished the freedom to explore anything they are interested in. The boys will learn something new on their own and then discuss it with Garry. Owen provides an example of their self-educating: "One day I watched a video by my favorite history YouTuber about the three kingdoms period in China. I didn't know anything about that period before watching that video. I trust his work because I do cross comparisons to see if other sources are reinforcing the ideas or not, and to check for facts." The kids have also been introduced to various news sources and they have made keeping up with current events a part of their chosen schedule. Garry and Terry's work in journalism, research and teaching has ensured that many discussions about subjectivity and bias (including our own) have taken place.

In many ways, the boys are now teaching Garry as much as he is teaching them and when asked, "What makes a good teacher?" Owen replied,

> *Patience. Dad is much more patient than my old teacher. Letting the kids have some control, not needing to run everything, letting some decision-making go to the students. I don't like being told what to do, in homeschool I do most of the stuff myself in my own way. Dad doesn't teach us so much anymore, we pretty much teach ourselves. We are self-directed, we are our own teachers. Dad helps us a lot when we need help. A couple of years ago he was around us all the time. Now we*

> *just call on him when we're stuck. Morgan and I have the required things we have to do, and we try our best to complete them all. The rest of the time we can do what we want as long as it is educational. We could goof off if we really wanted to, but we don't, because Dad trusts us. As much as I hate some of the required topics, I do need to learn them. I don't want to be Thor the Thick, I don't want to be dumb. It's good to learn writing and math.*

While we are very aware of the skills and knowledge that the boys are demonstrating through their various activities, we have chosen not to grade the schoolwork that they do. As noted throughout this book, one of the key problems in the school system is standardized testing. Inevitably, the curriculum becomes geared toward teaching students what they need to know to pass exams. This rigidity results in a one-size-fits-all approach to education that leaves little room for individual interests, strengths and passions. Garry and Terry have both seen the consequences of this approach in their university classes. Many of the students lack the capacity to engage in critical thinking and the primary objective of many students is not the gaining of knowledge but to figure out what they need to know to pass exams. Yearly, Garry and Terry ask their university students if they liked grade school and the overwhelming majority say no, and many say they can't remember most of what they learned.

The incredible curiosity and thirst for knowledge that is so evident in five year-olds when they enter the school system is largely gone by the time they get to university. What has happened in the interim? Thirteen years of schooling that has left them believing that learning is a boring and miserable experience. Education becomes something to 'get through' in order to receive a credential or to ensure employment. This instrumental attitude towards learning is a sad reflection of what is, for most kids, an extremely disempowering educational experience. Thankfully, a growing number of parents and teachers recognize this disturbing reality, and some are attempting to play a direct role in bringing change to the system. To this end, Terry suggests, "One key way that teachers can move beyond the instrumental approach is by recognizing that often the content of what we teach is less important than the values we engender through the teaching and learning process."

For Garry, the 'information' or 'facts' that Owen and Morgan learn in homeschool are of secondary importance, the primary objective is to build self-confidence and develop critical thinking skills in order to be able to problem solve. All the 'facts' and 'information' that the boys might memorize in a classroom are not necessarily going to help them address many of the issues they will encounter in the world throughout their life. However, as the Living Schools approach acknowledges, having the self-confidence and a skillset to figure out any problem they are faced with will be far more useful in any job and in life in general.

In reference to their self-direction and initiative, Morgan says, "If we have a problem with math or something else, we try to work it out ourselves before asking Dad for help." Similarly, Owen explains,

> *If we have a problem in homeschool we try to find the solution, that's how we roll. We don't leave a question hanging there, incomplete. I don't like leaving things incomplete. With a project, I like to go through with it until the end unless there's some special reason to cut it off. Dad is our teacher and he doesn't leave projects half-completed, he doesn't give up. When he was making the barn, it*

> *was tough, but he kept going, lots of hard work, and finished it in the end. This attitude is encouraged in homeschool.*

The self-directed aspect of homeschooling also better prepares students for university than traditional approaches. Dr. Carlo Ricci, a professor at Nipissing University's Schulich School of Education, told *The Peterborough Examiner* (Galen, 2013, para. 3), "What universities expect students to do is become self-directed learners. Homeschoolers are fantastic at this. It's an easier transition from homeschooling to post-secondary than it would be going from a mainstream school."

A major strength and an important aspect of our approach to homeschooling is the empowerment of Owen and Morgan: that they have significant control over their learning environment. Homeschool also allows for the study of a much greater diversity of topics and perspectives on the world. For example, learning First Nations perspectives, environmental views, as well as different political, gender and cultural perspectives from around the world. Owen's favourite topics are world history, geography and biology, and at 12 years of age he read *We Were Not the Savages* by Daniel K. Paul and then gave Terry a lecture dispelling the myths of what we learn in mainstream culture that was worthy, in her mind, of a university class. Morgan's favourite topics are geography, Spanish and music, with the latter involving him learning to play the piano, guitar and drums. "I have learned to play different songs like 'Stitches' and 'Let It Be' and sometimes I make up my own songs," he explains.

The control and freedom that Owen and Morgan have regarding their education leads them to look at a wide variety of topics. As Morgan explains,

> *We learn about other cultures. We watch the news and then we look up things about that culture. I know a lot about other countries and nature. We watched a video on the importance of bees. They pollinate the plants and make our food more edible. We learned about compassion for other people and animals. Every animal has a place in the food chain and they're all important. If butterflies die, then plants don't get pollinated. And if there are not enough plants then gazelles will die, and then lions and cheetahs might die. We learn a lot about nature. One day we went out with Amber and got some old man's beard and made tea out of it. I honestly didn't like it, but I learned about making tea from local plants. It's important that students learn about the environment and if you have a good social environment it will be better for the wild environment, for nature.*

Similarly, Owen notes,

> *We learn a lot about the world. We watch and read a lot of news stories and then research things going on in the world: Palestine/Israel; Crimea; famine in Yemen; the Spratly Islands, everyone wants a piece of these: the war on drugs; the war on terror. I love history. I've learnt about the Great Depression, the Holocaust, the Peloponnesian wars, the US Revolution—I know the stuff that caused it, Britain's debt, etc.; the three kingdoms period in China, the power struggles between the war lords; the Roman Empire; and after the fall of the Roman Empire, the eastern part of it, more commonly known as the Byzantine Empire, was still around, but it collapsed not long before Columbus went to the Americas. We do our own research. I like to look at the Indigenous people as well as the Europeans. In stories and history, mostly we hear from the settlers. Most of the time*

> *history in North America starts with Columbus even though the Indigenous have been here a lot longer. Settlers have wiped out a lot of history.*

Homeschool has also involved numerous field trips to places such as Membertou First Nations Heritage Centre, a local power plant to learn how electricity is generated, the Miner's Museum, a fossil museum, the SPCA, and the Alexander Graham Bell Museum. Owen and Morgan have had the privilege to travel to places such as Panama where they learned about the rainforest and the Panama Canal. We also lived in Cuba for three months where the boys gained insights into a socialist society while learning Spanish.

While we recognize that travel is a privilege, it is not the only way to create global awareness, as our daily homeschool experience makes evident. The internet is an incredible resource for knowledge acquisition on global issues and it also provides social platforms for global interchange and dialogue unimaginable just a couple of decades ago. For example, in March 2019, when young Swedish environmentalist Greta Thunberg was calling on communities of students around the world to strike from school to demand governments respond to climate change, Owen and Morgan decided to bring awareness of the issue through their social platforms, such as the online game Roblox.

When Amber taught homeschool, Owen, Morgan and Sadie also engaged in non-traditional lessons such as embroidery, cooking, yoga and meditation. Homeschool has also involved many outdoor activities. "When we were small Garry took us outside and taught us how to use where the sun rises and sets to know which way North, South, East and West are," Sadie recalled. Amber also regularly took the kids on nature walks. As she points out,

> *Just getting outside as much as possible is key. Even deciding where to go and in what direction, there's always something to navigate, a problem to solve, a communication issue. Asking questions and observing nature. For instance, looking at the buds and noticing with curiosity what is happening with certain plants over time. Most kids aren't outside anymore, they're in artificial environments. If we don't understand the natural world, we don't understand ourselves as natural beings. Gaining this awareness allows us to see ourselves as stewards of the land, understanding our relationship to nature with a sense of awe and wonderment. The earth is powerful, regenerative and vast. Animals have not lost their connection to the earth; we can learn a lot by watching them with curiosity and respect in order to develop in kids a sense of place, somewhere they can always return to in times of stress and trouble.*

As Amber pointed out, regaining and nurturing our connection to nature is crucial if we are to develop as, not only healthy individuals, but as healthy societies. Developing an understanding of this interconnectedness has been a constant theme in our homeschooling and in many ways Owen and Morgan are more advanced in this regard than Garry and Terry. On many of our nature walks down the lane behind our house and through the forest paths around our property, we would stop to admire an ant colony discovered by Owen and Morgan. The boys would point out aspects of the behaviour of the ants and the different roles and jobs of individual ants in the colony such as workers, caretakers, soldiers and gatherers.

Owen and Morgan are developing a connection with nature and all living beings that is occurring at a fundamental level. It is developing a degree of compassion in them both that is impressive. For instance, neither Owen nor Morgan can conceive of harming another living creature, not even something as small as an ant. One year ago, Owen received an ant colony 'kit' from his aunts Erin and Susan (Terry's sister and her wife). When Owen realized that he had to kill worms (a special breed of super worms from the pet store) to feed the ants he decided to ditch the ant colony idea and to take care of the worms instead. The ant colony kit now houses a dozen well fed super worms and is a living example of the way in which Owen and Morgan feel connected to nature and exhibit compassion to all living beings.

Conclusion

Homeschool is not possible nor is it desirable for everyone. Some of the barriers to homeschool include whether parents feel confident enough to provide a well-rounded education to their children. Another barrier is financial. If both parents need to work full-time jobs, then it becomes logistically challenging if not impossible to do homeschool. Consequently, privilege is often a factor in whether a family can homeschool. We are highly educated people with the financial means to allow one of us to devote most of their work week to this project. Many parents would like to be able to make this choice, particularly those parents who feel, for various reasons, that their kids 'don't fit' the system.

While clearly some children struggle with diagnosed mental and physical challenges, it is our belief that many behavioural issues reflect more on the system than the children in it, and that a true Living School would have a much greater capacity to integrate diversity and diverse styles of teaching and learning. Sadly, the styles of teaching and evaluating that dominate our school systems do not fit most children when it comes to achieving the broader purposes of education identified in this book. Kids who 'succeed' are those who are able to fit neatly into the boxes of a highly structured system. As Amber explains,

> *Schools hold you to a clock, everything is scheduled: eating, peeing, talking. We forget that we are natural beings with ebb and flow. In school we learn to ignore our body signals, our body wisdom, and we teach our bodies to suppress. I would say it's a suppression of the feminine that works with natural flows and cycles. When we are supposed to progress according to a schedule and along a linear path, we are using a masculine approach with no room for the natural process to unfold. Standardized tests are a box on a box, more rigidity. First Nations are forced to function with settler institutions sitting on top of them. The colonized must fit into boxes. Settlers often have negative perceptions of First Nations people and see them as 'failures' when they don't fit into those boxes. We all have body connections and connections to the earth, but we have learned to shut them off, we have forgotten our natural ways.*

For us, there have been two significant challenges to homeschooling: first, a lack of access to labs and equipment for science activities; second, figuring out how the boys can get the social interaction with their peers that they lose by not being in school. The first challenge is

one that we still have to address as they are now approaching the ages to engage in more advanced scientific discovery. Our solution to the second challenge has been to enroll the boys in an afterschool program at the Whitney Pier Youth Club so they spend the mornings in homeschool and then engage in social interaction for three hours every afternoon. The "Club," whose dedicated staff work under the leadership of long-time community activist Chester Borden, includes activities such as sport, dance and theatre and often there are speakers on issues such as racism, sexuality and drugs.

While we have never consciously thought about taking a Living Schools approach to homeschooling, we now realize that those very values have been instinctively embedded in our approach not only to education, but also to our lives in general. We have tried to help our boys understand the interconnectedness between humans, non-human animals and nature as well as the need for compassion if we are to find a meaningful and sustainable way to live in this world. As Owen explains,

> *Being mean isn't good for your body or brain. It feels better to be nice to people. I have learned a lot about animals and life. We're all on this little blue speck in an endless space. We haven't spotted any other life. There doesn't seem to be a lot of life out there, so we have to protect this little blue dot and everything on it. All the things that have happened to animals, humans and nature is recorded on this planet, so we have to look out for each other and protect the planet. We'll have a better chance of living and will be happier. We don't want to turn the only planet we can live on into a desolate rock. It would be better on Earth if we lived peacefully.*

Editors' Note

At the time of publication, many schools in Canada are closed in response to the COVID-19 pandemic. Students are learning online while many parents and guardians find themselves engaged with homeschooling for the first time as they too are working from home. Educators are wondering what the "new normal" will look like once schools reopen. Some households may choose to continue with homeschooling for diverse reasons. Whether students are learning from home or in formal classrooms, we see this chapter as another option for continuing to embrace Living Schools as we reimagine the future of education.

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PART III

ILLUSTRATING ATTRIBUTES AND PRACTICES OF LIVING SCHOOLS

Chapter 11

Values and Vision: Realizing a Living Schools Vision through Connection and Relationship

CATHERINE O'BRIEN & PATRICK HOWARD

In this chapter we explore the transformative vision on which the Living Schools concept is based, as well as the values that flow from that vision. In Part I of this volume, the contributors described schools, classrooms, formal and informal teaching, and learning environments, providing concrete examples of the Living School vision being realized in a diversity of educational environments. The authors in Part I provided exemplars of practices that bring children, young people, and adults together with the express purpose of illuminating the connectedness of our world, our essential belonging within it, and our relational ways of being and acting.

The leading of children, young people, and adults into a deeper sense of their relatedness to a living whole, to invite them to pay close attention to the interplay of the world and the felt-sense within them, is inherently a pedagogical undertaking. It also has a profound moral and ethical dimension. In that sense, there is an ecological demand made on us to address sensitively how we provision ourselves with food, energy, water, shelter, livelihoods, and well-being in a sustainable, mutually enhancing manner. It is this moral imperative that ultimately provides the vision for the Living School approach.

Schooling and education, both formal and informal, are called on to contribute to the urgent need for a new social and ecological imagination—a new consciousness of interdependence. We are required to move beyond simply *knowing* the nature of the interdependence on the living systems that sustain us. We need a new consciousness so we can deeply *feel* our inherent relationship with the myriad living and nonliving others with whom we share this planet.

Engaging with the World and Developing Cultural Awareness

The human journey through life is undeniably a relational one. We grow and realize our potential as we move into deeper and wider contact with the world. As we enter more encompassing realms of otherness, we build a sense of commonality and belonging with

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C. O'Brien & P. Howard (Eds.). (2020). *Living schools: Transforming education* (pp. 141-149). Winnipeg, MB: ESWB Press. ISBN 978-0-9939534-2-2. Retrievable from www.ESWB-Press.org

others. The sense that our relationality should extend beyond the human realm is tacit; there is shared recognition that our humanity is incomplete until we have established our relations with the larger natural world.

Developing a cultural awareness of other's world views and identities requires careful attention and attunement to those who are different from us. In Chapter 8, Tanya O'Brien and David Coyne describe sensitive pedagogical practices designed to foster a deep sense of interconnectedness—an ecological consciousness—in the students at Featherston Drive Public School. Using the growing and preparation of food, students from different cultures and languages came together to learn, grow, and share delicious food. The most essentially embodied connection to water, air, soil, plants, and to each other played out around dining tables to amazing effect. O'Brien and Coyne (Chapter 8, this Volume) write:

> Students from over 15 countries came together to cook, eat, and talk. Eventually parents were also invited in to teach us …. Gardens offered excuses for socializing and sharing. We have all learned so much about the plant world from the four corners of the globe, beyond our curriculum of organic companion gardening. (p. 110)

As these teachers demonstrate, we are designers and participants in environments and processes through which people can take on an ecological way of being in the world.

Modeling Care and an Ecological Consciousness

The ability to demonstrate and model care for plants, animals, and the living world can be considered a way of being; it is to be attentive, attuned, and aware with a well-developed capacity to demonstrate concern and a desire to act in a manner that reflects our affinity and affiliation with the larger natural world. It is this relation that is at the heart of ecological sensibility rather than any one value. In Chapter 5 (this Volume), Rosanna Cuthbert describes out-of-school excursions that exemplify this development of deep affiliation with the larger world and requisite care and empathy that is naturally attendant in such situations:

> These outdoor adventures, which vary from one hour to half-day events, provide a rich, authentic, and thought-provoking learning environment, designed initially not only to achieve Science learning outcomes such as changing habitats and animal adaptations but also for students to discover the interconnectedness of living things. Students are able to gain specific knowledge about plants, animals, habitats, bugs, birds, critters and lifecycles, as well as to have opportunities to develop contemporary learning competencies such as critical thinking, collaboration, communication, creativity, character, and citizenship. These learning experiences foster an authentic urgency for students to reference plants and critters they discover in their Manitoba field guides, to search for important information on their iPads, and/or to seek out books to read for information in a quest to find out more

> about their wonders and discoveries. Students are reading, writing, gaining knowledge, researching, exploring, discussing, and listening: important building blocks and skills that they need to acquire, enhanced by the other benefits of being outdoors, connected to nature, and more physically active. (p. 68)

What if this approach was the learning experience of all children, and that each year students were immersed in daily opportunities to explore their world both inside and outside the classroom designed to clarify and deepen the relationships they have with themselves, one another, other species, and the planet?

In Chapter 7 (this Volume), Brent Kay, the former superintendent of schools in Vermont who was dedicated to changing his school system through transformative governance and leadership practices, points to how a Living School vision is attainable and scalable. Kay advocates for an *ecological* sensibility as it pertains to organizational structures by loosening rigid divisions and hierarchies in favour of more flexible, resilient ecosystem approaches that are responsive to the needs of the end users. Kay (Chapter 7, this Volume) writes,

> Enabling teacher and student voice and agency is perhaps the most important goal of transformational change and the creation of Living Schools. (p. 101)
>
> In order to achieve reform of this nature, teachers and students must play a central role and not be relegated to the sidelines; the following mental exercise demonstrates why.
>
> Think of a child you know and reflect upon a time you saw that child doing something they were not interested in. Now think of that same child and a time when they were engaged in an activity that deeply intrigued and interested them. Ask yourself what the differences were in the levels of learning and outcomes for the child in both situations. … In the latter situation, it is likely that you remember the child as deeply engaged, happy, flourishing, and focused on the task at hand. Placing teacher and student voice and agency at the forefront of educational reform will significantly improve relevance in the teaching-learning environment, restore teacher professional judgement in the learning process, and result in higher levels of engagement among students. (p. 102)

Realizing the Living School vision and developing the values to support a new ecological consciousness requires deep engagement by everyone responsible for the education of the young. It calls for a renewed understanding of our reciprocal relationship with the larger living world—a relationship that speaks to human connection, empathy, compassion, and caring.

Developing Compassion

The attainment of virtues like care, compassion, sensitivity, responsibility, and empathy is not commensurate with the knowledge we possess. History and our own experience tell us

this. However, one of the most vexing philosophical and pedagogical questions is, "Can values be taught?" This query has been with us for centuries (Aristotle, 1985; Ryle, 1975) and continues to be controversial today. Nel Noddings's (2002) work on care theory posits that values *cannot be taught directly* but are "defined situationally and relationally" (p. 2). The Living School concept reflects this understanding in its attributes and practices that call for the facilitation of personal development, deepening and broadening relational ways of being in the world, the creation of collaborative capacities, and community building. The attributes and practices taken together have as their goal the development of an ecological consciousness, a deep and abiding affiliation for the world, for our communities, and for our fellow beings both human and more-than-human. Gibbs (2017) writes that compassion "refers both to something we embody and to what we *do* in the world. But the important thing … is that for compassion to mean anything at all, it must entail relationships and action" (p. 35).

Promoting Health and Well-being—Students, Staff, Community, Natural Environment

The Living School framework (Howard & O'Brien, 2018) devotes an entire section to Health and Well-being in the right-hand column. Why do we also include it under Values and Vision? We are emphasizing that the vision of *well-being for all* is at the very core of Living Schools and influences how we approach all of the other attributes and practices. This also means that schools explicitly demonstrate the values of *well-being for all*—not just conventional views of well-being that typically focus on individual health and well-being but an inclusive value that recognizes the relational aspects of well-being within ourselves, with other people, and with the natural world. We see this captured exquisitely by Tanya O'Brien and David Coyne in Chapter 8 (this Volume):

> Relationships. We have collectively determined that it all comes down to this. In our curriculum, we teach the interconnectedness of all things on earth—from individual to individual, species to species, and ecosystem to ecosystem; every living thing is connected and affects each other. We must also model it in our interactions with each other, our community and our earth. (p. 115)

Notice that the Featherston Drive staff mention that this interconnected perspective on relationships is incorporated in the curriculum as well as modeled with interactions in the school community.

It has been our experience that there is a tangible feeling of well-being when we enter a school that authentically infuses healthy relationships and *well-being for all* into all aspects of schooling. The new principal at Featherston Drive Public School was struck by this as well.

> To suddenly be immersed in a school setting where sustainable happiness is a major focus continues to be a blessing. I see a plethora of multiculturally diverse students

> demonstrate genuine kindness towards their peers when they are upset. I see students of all ages treat their peers from all four of our autism units with the utmost respect. Even in times of conflict, students are able to show empathy towards others, in part because their teachers take the time to practice collaborative problem-solving with them. I see active student and staff participation in impactful initiatives such as the Environmental Club, Cooking Club, Hackergals and Shannen's Dream. These extra-curricular opportunities make explicit connections with current global awareness issues, and consequently enable our students to make responsible choices and decisions affecting the larger-scale population. (Chapter 8, this Volume, p. 116)

John Stewart describes the "living philosophy" behind Living School (Lismore) in Chapter 4 (this Volume). This is captured through the curriculum and practice regarding Living Food, Living Well, and Living Architecture, which "coincides with so many attributes and practices outlined by Howard and O'Brien" (Chapter 4, this Volume, p. 49). The VAST model (Chapter 4, this Volume, p. 53) graphically portrays the integration of these values with attitudes, skills, and teaching. Sean O'Brien Murray's (Chapter 9, this Volume) discussion of edible education conveys how these values come to fruition in practice. It is possible, in fact, for edible education to reflect *all* of the Living Schools Attributes and Practices.

> In essence, edible education prioritizes our relationship to food as a thread throughout the entire curriculum, potentially more extensively than enacting a 'green program' or implementing a healthy lunch program. (p. 119)

Solution-focused Growth Mindset

The terms "solution-focused" and "growth mindset" are terms frequently encountered in education discourse. When we use these terms together, we have a range of applications in mind, including a strength-based approach to personal and professional challenges. This also applies to how we present local and global challenges. Rather than approaching the many social, economic, cultural, and environmental challenges solely as "issues" or "problems," we acknowledge the need to address these challenges by developing creative solutions. This reinforces the fact that each of us can be change leaders in our spheres of influence and is also an ideal basis for real-world, project-based learning. While "growth mindset" tends to refer to individual attributes of openness to change, growth, and a resilience to setbacks, it can also refer to a mindset that recognizes that the status quo, even if it is comfortable, may be in need of modification. We can see this in education leaders who reflect on their own practice and are champions for colleagues who are exploring new pedagogies. Rosanna Cuthbert exemplified this when she assumed her new role as the principal of Sigurbjorg Stefanson Early School (Chapter 5, this Volume):

> Transitioning into my leadership role from being a teacher and assistant principal in the same school caused me to pause and reflect deeply on my own vision as an educational leader. I invited my staff to join me on what I referred to as a 'messy path', one we could navigate through together based on what we felt truly mattered in education, on how we truly believed students learn and flourish. We acknowledged that as educators, we tend to measure that which is easily measurable. As a result, contemporary learning competencies such as critical thinking, creativity, citizenship, communication, and collaboration are often neglected or overlooked, even though many educators feel that these competencies are becoming even more essential in our constantly evolving and technologically advancing global society. (p. 69)

Likewise, when the Orange Southwest Supervisory Union (OSSU), described in Chapter 7 (this Volume), set out to develop a comprehensive strategic plan, their guiding question was, "In ten years, what should a graduating senior know and be able to do in order to live well in our globalized world?" Kay (Chapter, 7, this Volume) tells us that,

> asking a future-based question was imperative; it focused the discussions on what a vision for the future ought to be and shaped the development of a relevant vision and mission statement. Discussing what people wanted for their children's futures and for the futures of their community was a unifying experience. In addition, the discussions resulted in the identification of over 50 operational/systematic improvements that were required to enable our pursuit of what we now understand as being a Living School model. (p. 98)

The Two-Eyed Seeing concept that was developed by Mi'kmaw Elder Albert Marshall is another example of a solution-focused growth mindset. He advocates the benefits of viewing the world through both an Indigenous world view and a Western world view so that we glean the benefits of both perspectives. This applies to Indigenous and non-Indigenous people. Synthesizing insights from these world views will enrich our understanding of how to bring the values and vision of *well-being for all* into our schools.

> One must see from both eyes, the eye of our own culture and the eye of the Western world view. People must learn Two-Eyed Seeing so that knowledge of the physical is not separated from the wisdom of the spiritual. We can see better when we see with two eyes. (Chapter 6, this Volume, p. 85)

Trusting and Respectful Relationships

We commented above that healthy relationships and appreciating the interconnectedness of human well-being with environmental well-being are pivotal for the attribute of promoting health and well-being. We single out trusting and respectful relationships because these not

only impact health and well-being but also influence the cohesiveness of a school team, the readiness for educators to take risks with their practice, the feeling that each teacher and staff member is supported, and that relationships with students build trust and respect amongst students and with staff.

A notable facet of the Sigurbjorg Stefanson experience is that the principal, Rosanna Cuthbert, invited the staff to join her in an exploration of learning that she believed would be meaningful. Rosanna was candid about the "messy path" while also being respectful of the contributions that staff could make collectively. She communicated confidence and trust that they could "navigate through together based on what we felt truly mattered in education, on how we truly believed students learn and flourish" (Chapter 5, this Volume, p. 69). These kinds of trusting environments enable students to openly express themselves as the young student did that we heard about in Chapter 6 (this Volume) from Whycocomah Education Centre.

> While cleaning up the greenhouse, Chance, a First Nations student in Grade 2, looked me in the eye and with the wisdom of many ages said, 'If we help take care of the earth, the earth will help take care of us.' (p. 88)

This respect was also evident at Dawson College when the nesting site for a mallard duck was carefully protected even though the mother duck had selected a location on the downtown Montreal campus that was frequently used at that time of year (Chapter 14, this Volume). No doubt that would create tension and some hard conversations, but these are also the kinds of conversations that we need to have as we reflect upon our relationships with one another and with the natural world.

This trust and respect for one another, for our community, for the global community, and for nature can be communicated both explicitly and implicitly. This attribute permeates all of the others in many ways. Our teaching practices, infrastructure choices, school policies, and support for student voices, for instance, are all influenced by this overarching culture of trusting and respectful relationships.

Respecting Indigenous World Views and Ways of Knowing

The Living Schools framework aims to portray a comprehensive pathway for transforming education within an overarching vision of *well-being for all, sustainably*. We are striving to demonstrate that when schools integrate these attributes into policy, culture, and practice that students and staff will thrive. Many views of well-being or positive schools initiatives might set their sights on those goals alone and these would indeed be admirable steps forward. However, we are advocating that we expand these goals with an emphasis on sustainability so that the well-being of other people and the rest of the living world is understood to be interconnected to student and staff well-being. While Living Schools offers an innovative perspective to conventional schooling, we also recognize that a more holistic

understanding of well-being has been integral to Indigenous world views and ways of knowing long before academics began to study such themes. Deer and Falkenberg (2016a) write:

> *Mino-pimatisiwin* (literally means "the good life" in Cree) is the realization/acquisition of healing, balance, and life-long learning. The realization of the good life, particularly for First Nations peoples, may be reflected in the following principles (Gray, Coates, & Yellow Bird, 2008, pp. 134–135):
>
> - The concept of ***wholeness*** is about the incorporation of all aspects of life and the giving of attention and energy to each aspect within ourselves and the universe around us.
> - ***Balance*** reflects the dynamic nature of relationships wherein we give attention to each aspect of the whole in a manner where one aspect is not focused on to the detriment of the other parts.
> - All aspects of the whole, including the more than [human] world, are related and these **relationships** require attention and **nurturing**; when we give energy to these relationships we nurture the connections between them. Nurturing these connections leads to health while disconnection leads to disease.
> - ***Harmony*** is ultimately a process involving all entities fulfilling their obligations to each other and to themselves.
> - ***Growth*** is a life-long process that involves developing aspects of oneself, such as the body, mind, heart and spirit, in a harmonious manner.
> - ***Healing*** is a daily practice orientated to the restoration of wholeness, balance, relationships and harmony. It is not only focused on illness, but on disconnections, imbalances and disharmony.
> - ***Mino-pimatisiwin*** is the good life or life in the fullest, healthiest sense. *Mino-pimatisiwin* is the goal of growth and healing and includes efforts by individuals, families, communities and people in general, in fact, all living forms, including the more than human world. (p. 2–3, emphasis in original)

Deer and Falkenberg (2016a) add that there are "core values" associated with these principles —Respect, Sharing, and Spirituality—that recognize that "there is a non-physical world" (p. 3). These Indigenous perspectives inform the framework for the entire book on *Indigenous Perspectives on Education for Well-Being in Canada* (Deer & Falkenberg, 2016b).

John Stewart describes, in Chapter 4 (this Volume), how Living School (Lismore) will embrace this attribute of respecting Indigenous world views and ways of knowing. He acknowledges that "Australia's first peoples have had a consistent culture connected to country for over 50-60,000 years" (p. 55), and he outlines plans for respecting traditional language, offering scholarships to Indigenous students, and integrating Indigenous culture into "practical hands-on experiences, such as excursions to sacred places with Elders, architecture, weaving, lore, a medicinal garden, communal gatherings, songlines for learning, Elders' council" (p. 56), and so forth.

The Featherston Drive staff have modeled respect for our First Nations through Shannen's Dream, and student quotes in Chapter 8 (this Volume) reinforce their awareness of

respecting cultural diversity. Gradually, activities related to Shannen's Dream led to explicit plans for the school to incorporate Indigenous perspectives throughout their curriculum.

In Chapter 6 (this Volume), Betsy Jardine's conversation with Michelle Marshal-Johnson is a poignant narrative about Indigenous world views that are inseparable from language and culture. Michelle's mother was chosen as the Keeper of the Language, which became her life's work: "Everything is embedded in the language, including our culture. The root of Mi'kmaw people is language and the root of who we are. Language is the core" (p. 84). We hear from Betsy that, as an educator in a First Nations community, she became convinced "that the Mi'kmaw world view could provide a life-centred focus for our education systems" (p 80).

It is this life-centred world view that will help us to grow as Living Schools. This means that we are not simply advocating for "learning about" Indigenous world views, as if this is a subject to master, but that we bring a Two-Eyed Seeing mindset to the process, striving to understand how Western perspectives can be enriched through a deeper understanding of Indigenous world views and ways of knowing.

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Chapter 12

Leadership: Creating a Culture of Leadership to Support Living Schools

BRENT KAY

The Living Schools model requires a fundamental shift in how we view and value education. The model specifically brings into question what is learned, how it is learned, where and when it is learned, and ultimately why it is learned (Hopkins, 2013; O'Brien, 2016). Living Schools are based on the premise that the purpose of education is to create a sustainable model of *well-being for all*—people, communities, economies, and ecosystems. Schools can be positive catalysts for vibrant communities and neighbourhoods. By becoming partners in the economic and sustainable development of the community, schools can lead in what it means to live together in a shared responsibility for the places we call home. If this is our primary goal, it begs asking—How do you create a culture of leadership that enables the Living Schools model to flourish in a scalable manner? This chapter outlines some of the primary considerations that educational leaders at the provincial, regional, and local level must address if we are to transform our current teaching-learning environments into Living Schools. In other words, what would educational leadership look like if it were enabled to act on the following issues?

- Redefining the traditional role of governance to include community connection and well-being through Community Economic Development (CED) partnerships and explicit linkages with political, business, higher education, community leaders.
- Creating a school vision, policies, and procedures that explicitly reflect the principles of Living Schools, sustainability, and CED.
- Creating metrics to track and measure the achievement of Living Schools, sustainability, and CED partnerships that include teachers, students, and CED partners.
- Creating explicit financial and budget linkages to Living Schools, sustainability, and CED initiatives and outcomes.
- Creating a culture that enables teacher and student voice and agency within the broader parameters of Living Schools, sustainability, and CED.

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C. O'Brien & P. Howard (Eds.). (2020). *Living schools: Transforming education* (pp. 151-159). Winnipeg, MB: ESWB Press. ISBN 978-0-9939534-2-2. Retrievable from www.ESWB-Press.org

- Redefining student success away from our current trends that favour increasing standardized testing and international test scores and towards authentic demonstrations of real-life learning outcomes. The authors argue such a place would enable people to flourish, with staff and students on a co-learning journey, and where there is explicit awareness that schools are interconnected with local and global communities, including the natural world.

A Living School Vision

Leadership begins with a clear shared vision and value statements that point to clear goals and objectives. A Living Schools vision would have, at its centre, *well-being for all*, sustainably. In addition, the vision might include specific value statements linked to the Living Schools Attributes and Practices (Howard & O'Brien, 2018) such as: "Students will be able to demonstrate care and compassion for others and Nature"; "Students will be able to demonstrate self-compassion, emotional resiliency, and healthy life choice"; "Students will be able to demonstrate a solutions-focused mindset when facing challenges and opportunities"; and "Students will be able to demonstrate respect for Indigenous world views and traditional ways of learning," and so on.

In creating a Living Schools vision, the school's leadership is challenged to develop metrics to demonstrate student and teacher success toward achieving the school's vision. In direct response to this challenge, Randolph Union High School (located in the school board described in Chapter 7, this Volume) developed and implemented its "Habits of Mind, Habits of Work, and Habits of Heart" (Kay, 2013), thereby explicitly outlining expected learning outcomes and providing an authentic methodology to assess student progress.

As a second example, we saw in Chapter 3 (this Volume) how the administration, teachers and students at Riverview High School implemented an inquiry and problem-based learning environment that served to enable student and teacher voice and agency by challenging students to explore the big question What does it mean to be human? The exploration took place across all content areas and culminated with an authentic public exhibition of the projects and a student-generated magazine that served to record the design and implementation of the projects. These examples demonstrate how a shared vision can provide inspiration for transformative teaching and learning. However, the development of a school's vision is a shared responsibility with a school board. Without the support of a school board it is difficult to create meaningful, scalable change toward a Living Schools model and to integrate schools into the economic and social life of the community. Consequently, governance becomes very important and an in-depth review of the current state of educational governance is required.

Good Governance

Redefining the traditional role of governance represents an important challenge in the Living Schools transformation process. One of the end goals would be facilitating meaningful linkages with teachers/students and the community partners—expanding the teaching/learning environment beyond the classroom and walls of the school, especially in the areas of curriculum development and implementation, monitoring student outcomes, and enabling teacher and student voice and agency.

Successful organizations are led by boards that know the business at hand, operate within the principles of governance, focus on achieving the organization's desired outcomes, and effectively manage internal and external relations. The Canadian Audit and Accountability Foundation (2020)[1] identified the following characteristics of effective governance. Board members must be accountable to the individuals, groups, and organizations that have conferred responsibility to them. Boards set the "tone at the top" of the organization by embracing good governance practices. Integrity of the board is critical and maintained through impartial and ethical behaviour that rests in the organization's best interest. Board stewardship refers to the Board's responsibility over the organization's resources. Finally, boards must strive to maintain transparency on behalf of the shareholders by ensuring they have access to full, accurate, and clear information pertaining to the organization's business at hand.

To facilitate a scalable transformation to a Living Schools model, educational governance must redefine its purpose, become a true community partner by contributing to economic and social well-being, and lead the development of an organizational culture that promotes the principles of Living Schools and the *well-being for all*, sustainably. Lessard and Brassard (2005) discussed the notion of "Good Governance" that focuses on making governance and the marketplace evolve more positively towards equity and justice. Further, they suggested that Good Governance redistributes power and integrates excluded groups, empowers various actors, and increases institutional and political power. In this expanded vision of governance, decentralization is key to enhancing local control and enlarging democratic power.

Adopting the concepts of Good Governance fits well with CED, which is typically defined as action by people at the local level to create sustainable economic opportunities and to improve social conditions for the well-being of all.[2] CED occurs when people in a community take action and, as a result, local leadership and initiative are then seen as the resources for change (Schaffer, Deller, & Marcouiller, 2006). The Canadian CED Network adds that in order for CED to be successful, solutions must be rooted in local knowledge and led by community members using holistic and integrated approaches. These definitions highlight one of the most significant challenges we face in transforming our education systems toward a Living Schools model (or in any direction for that matter).

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[1] See https://www.caaf-fcar.ca/en/oversight-concepts-and-context/what-is-oversight-and-how-does-it-relate-to-governance/what-is-governance.

[2] See http://www.cf-sn.ca/community_economic_development/definition

Canada has experienced wide-scale amalgamation of local school boards, thereby removing a key component of educational leadership and making scalable school transformation inherently more difficult. Between the 1990s and 2005, the reduction of local school boards ranged from 20% in British Columbia to 80% in Newfoundland (Lessard & Brassard, 2005), and in 2018, Nova Scotia removed all local school boards.

Galway et al. (2013) examined the impact of such wide-scale centralization on local school districts and concluded that provincial departments of education (DOEs) are "unsuitable proxies for the leadership of schools," and suggested "a more constructive approach would be to ascertain key attributes of effective school boards and to determine how these attributes can be replicated in all school districts" (p. 2).

School board members are elected representatives of their local communities and, therefore, play an integral role in forging meaningful CED partnerships and attending to the local and regional values of their communities. Galway et al. (2013) suggested that the centralisation of power at the provincial level has hampered the ability of schools to retain a connection to community values and local priorities. As a result, the amalgamation of local school boards has resulted in the erosion of local democratic power and the autonomy needed to scale-up the Living Schools model. While not insurmountable, communities are faced with the added challenge of re-establishing strong democratic processes in the governance of schools, which would ensure local voice and agency in educational matters.

The Economization of Schools

Galway et al.'s (2013) characterization of provincial departments of education as "unsuitable proxies for the leadership of schools" (p. 2) becomes more poignant when one examines how to create a culture that enables teacher and student voice and agency, and how to redefine student success. These two concepts are inextricably linked, especially within our growing focus on standardized testing and international test scores. For example, the loss of local school boards has been accompanied with something I refer to as the economization of education. In other words, governments in Canada and the United States have taken a simple economic input-output model and misapplied it to public education and its definition of successful schools.

Economic input-output models can be described as a matrix of raw economic data collected by companies and governments to study the relationships between suppliers and producers and the economic impact of the import or export producer goods to meet consumer demand.[3] Central to input-output models is the ability to control inputs and outputs by better understanding the relationships between them and then identifying the processing tasks required to transform *inputs* into *outputs*.

Making the assumption that students and learning outcomes are controllable variables that can be standardized to produce reliable and valid test score results and, hence, successful

[3] See http://www.businessdictionary.com/definition/input-output-model.html

schools, devalues the learning process and leads to a misguided view of what successful schools ought to look like. What is truly important is nurturing students to become socially responsible citizens and future leaders in their respective communities (responsible stewards that ensure *well-being for all*, including non-human life forms, and our ecosystems), not incremental increases in standardized math and reading test scores.

Further, the movement towards standardized tests and international test scores has been led in complete isolation from the teaching-learning environment. Schul (2011) suggested standardization reforms "stripped teachers of their professional judgement," and in the process, devalued teacher and student voice and agency. To successfully enable scalable reform towards the Living Schools model, we need to ensure teacher and student voices are central to the process, not relegated to the sidelines.

The traditional school culture in North America is content-driven and where learning is defined as a list of subject matters and facts that you need to acquire. Under such a structure, standardized testing flourishes because student success is measured primarily on the basis of whether the student masters a sufficient number of facts in a particular content area. An examination of school report cards demonstrates just how compartmentalized our current learning model has become and reflects the isolation of content and assessment.

By comparison, Finland's National Agency for Education (2020) [4] identifies its objectives of basic education "to support pupils' growth towards humanity and ethically responsible membership of society and to provide them with the knowledge and skills to succeed in life." Finland has purposely moved away from a content-driven model and toward a holistic model through the use of real-life problem solving that requires the integration of content areas, not their isolation. Finland stresses the importance of holistic learning processes, not testing, and the particular importance of the autonomy and responsibility of local educational authorities (boards) and schools to draw-up their own curriculum that aligns with the national framework and guidelines. In short, Finland understands the importance of teacher and student voice and agency and the primacy of linking schools to their local and regional communities.

Teacher and student involvement in the curriculum development process within the guiding principles of *well-being for all*, sustainability, and CED is the key to creating a scalable Living Schools transformation. Enabling teacher and student voice and agency would create understanding and buy-in on the part of teachers and students, directly tie the teaching-learning environment to the desired outcomes of the school and introduce relevance to the teaching-learning environment through deep connections between schools and their local and regional communities.

In their journey to becoming Living Schools, the Cookshire Elementary School (CES) (Chapter 3, this Volume) and the Sigurborg Stefanson Early School (SSES) (Chapter 5, this Volume) provide real-life examples of the importance of enabling teacher and student voice and agency. The CES staff began their journey when they became convinced of the need to integrate nature more fully into the school's teaching practice in order to enhance student well-

[4] https://www.oph.fi/en/education-system/basic-education

being. A decision to focus on whole-school projects that were directly tied to their local community issues related to garbage, composting, and recycling resulted in forging lasting linkages to community leaders and resources. SSES, in its efforts to reconnect students to nature by increasing visits to their community's local natural habitats (the beach, harbour, and wetlands), changed the dialogue between teachers and students resulting in an enriched, authentic learning environment. Both schools experienced a spike in student engagement and teacher buy-in and enthusiasm. Most importantly, both CES and SSES realized that student outcomes far exceeded their targeted curricular outcomes.

These examples demonstrated the power of transformative teaching and learning to inspire the community at large and thereby to drive change and garner support at the school board/district level. However, working from a shared vision with the appropriate governance structures in place increases the likelihood of success, and the longevity of innovation and progressive approaches.

Understanding the School Budget

Successful organizations understand what they are trying to achieve, identify desired outcomes, and rigorously monitor their achievement. Further, a successful organization includes specific provisions in policies and procedures that are directly linked to its purpose and desired outcomes. By doing so, the organization makes it clear to all stakeholders what it values most. As such, a Living School would include in its policies and procedures specific provisions for community partnerships, education for sustainability, and *well-being for all* reflecting Living Schools Attributes and Practices (Howard & O'Brien, 2018).

Many organizations do not clearly identify why they exist and what desired outcomes they desire. Fewer organizations effectively monitor their desired outcomes. However, even if the leadership of the school succeeded in completing these tasks, it would not guarantee its success, especially if the financial policies and budget allocations were not aligned to the school's purpose and desired outcomes. One of the best ways to ensure success is to identify a reform strategy, spend the necessary organizational time and resources to roll-out the reform initiative and ensure the requisite financial resources to support the reform initiative are committed. Directly tying financial resources to desired outcomes tells people what is important and adds legitimacy to the organization's vision, mission, desired outcomes, and key initiatives.

At its most fundamental level, most organizations could do better ensuring they get the most out of the financial resources they have. Regardless of industry or sector, organizations have three options: they either over-spend and create a deficit, employ a "spend-it-or-lose-it" strategy with an aim at ending the fiscal year with as close to zero as possible, or underspend and create a surplus. I would argue that the first two options are not acceptable (under most circumstances) and represent the biggest reasons why organizations underperform and fail to employ innovative and creative transformational strategies. When organizations (including schools) become purposeful, learn to directly tie their financial resources to desired outcomes

based on a shared vision, and employ participative development strategies at all levels, creativity, innovation, and efficiency flourish.

For example, in most schools, "the budget" is a distant concept that is developed and implemented with little-to-no involvement of teachers and students. As a result, the word *budget* carries a negative connotation and is often used as an excuse to stay the course and not engage in transformation. While school boards are ultimately responsible for the budget, they often become overly prescriptive through the use of a line-item approach. By doing so, principals, teachers, and students become disengaged and stifled in their ability to apply creative and flexible approaches to funding and implementing local initiatives. Worst of all, on the front lines, teachers adopt a "spend-it-or-lose-it" approach and become proprietary over the relatively small amount of money they have access to.

Instead, school boards can employ a holistic approach to budgeting through the establishment of a broad set of budget parameters directly linked to the desired outcomes of the school. For example, a school board could state, "The Superintendent shall not cause or allow financial planning for any fiscal year or the remaining part of any fiscal year to deviate materially from the board's priorities, risk financial jeopardy, or fail to be derived from a multiyear plan." The superintendent then becomes responsible for working with principals, teachers, and students to identify the specifics of how the school's financial resources will be prioritized and allocated.

One of the most common school-level budget mistakes principals make is micro-allocating budgetary resources down to the department and teacher level. For example, creating a line item that provides each teacher with a token dollar amount for field trips or classroom supplies. Teachers learn to spend every penny they have whether they need to or not for fear that if they do not do so they will not receive money in the following year's budget. It is not uncommon, for instance, to visit schools and classrooms with boxes of unopened supplies and materials sitting unused in the back corner of a classroom cabinet or closet.

If instead, a principal was enabled to adopt a school-wide, holistic approach to budgeting—one that engaged teachers and students to prioritise *school-wide initiatives* and was directly linked to the school's financial resources to these initiatives, a significant increase in the effective use of financial resources would be realized. In my experience, the use of a holistic budgeting approach eliminates deficit and "use-it-or-lose-it" spending habits and fosters a school climate of efficiency and purpose that results in a surplus spending model. This, in turn, promotes creativity and innovation because students and teachers develop a sense of ownership, a clear understanding of how and why their financial resources are being utilized, and demonstrate greater guardianship over how money is spent.

Considerations for Further Discussion

Repurposing current educational practices, resources, and outcomes is a critical component of the creation of viable learning communities that enable *well-being for all*. This leads to the question of what must be done to enable scalable change that aligns with the vision

represented by Living Schools. To begin, I would argue that we need to rethink our amalgamation efforts over the past thirty years and consider reintroducing appropriately sized, local school boards. Further, we must equip local school boards with the authority, responsibility, training, and tools to effectively lead and support scalable transformation to a Living Schools model. The loss of our local school boards has hampered the ability of schools to retain community values and explore local priorities.

Secondly, it would stand to reason that transforming schools toward a Living Schools model requires 21st century leaders—leaders who understand systems thinking, who embrace leading stakeholders toward a shared vision of education that reflects the sustainable well-being of communities, and who appreciate the central role schools must play in the attainment of that vision. School leadership, at all levels (governance, central office, principals, teachers, and students) must work to explicitly reflect and implement the principles of Living Schools.

Third, we must expand the traditional definition of CED to include and expect the inclusion of local schools and leaders. The Living Schools model requires a holistic approach to learning, one that involves genuine partnerships with political, business, higher education and community leaders and its resources.

Fourth, we must develop and implement authentic measures of student and school success. Sociologist Bruce Cameron (1963) once said, "not everything that can be counted counts, and not everything that counts can be counted" (p. 13). We must break our tendency toward standardized testing as a sole measure of student, teacher, and school success, and engage our communities in a discussion about what students need to know and be able to do in the future. Teachers and students must be at the forefront of this discussion.

Fifth, we must learn to make better use of the financial resources we entrust to schools and ensure our financial resources support a transformation towards a Living Schools model. Specifically, this requires identifying desired outcomes and directly linking our financial allocations to them through the use of a participatory and inclusive budget process—one that involves teachers and students.

Lastly, and most importantly, we must enable teacher and student voice and agency if we are to successfully scale-up a Living Schools model. Perhaps the most poignant message we learned from visiting and talking with schools that have worked to become Living Schools is the central role teachers and students played in creating 21st century learning environments.

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Chapter 13

Teaching and Learning: Teaching and Learning for Experiential Renewal and Human Becoming

PATRICK HOWARD

In this chapter, I look closely at the Living School attribute of Teaching and Learning. Using cases presented in Part I (this Volume), I will show how teaching practices and approaches to learning are core to realizing a different vision for education.

As the chapters at the beginning of this Volume illustrate, this is a challenging and exciting time to be an educator. It is an era of rapid change built on advancements in technology, deeper more nuanced understandings of how children learn, and greater commitments to providing learning opportunities and environments that engage children and young people in meaningful and authentic learning tasks. It is a time rich in possibility.

Student experience and agency are core to teaching and learning in a Living School. Building on 21st century teaching and learning approaches, the teacher's role in a Living School shifts to guide, mentor, co-learner, and learning partner. There is innovative pedagogy happening in education today and Living Schools incorporate and extend these new pedagogies. The increase in popularity of maker spaces, a Do-It-Yourself (DIY) ethos, robotic competitions, hack-a-thons, and problem- and project-based learning (PBL), all "accelerated" (Fullan & Langworthy, 2013, p. 4) by sophisticated information and communication technologies, provide an identifiable process for the application of interdisciplinary, experiential learning and creative processes.

Living Schools reflect a life-affirming understanding of education and a fundamental commitment to the learning experience. In the ethos of the Living School, *experience* is understood differently than that found in most current educational discourses, including that of 21st century learning. The experience of learning, the learning experience, and experiential *renewal* for both students and teachers are at the *heart* of the Living School concept. But first let us look at how *life* and *living* can provide the ground for the educational experience.

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Beginning with the Life Process

In the Living School framework, the attribute of Teaching and Learning and the practices associated with the attribute speak to experience rooted in the life process. Teaching and learning are re-imagined for relationship and participation.

Guided by the basic tenet that our thoughts, feelings, emotions, ideas, and behaviours all arise as a direct result of our contact with the world, teaching and learning in the Living School is participatory and relational. Our existence is a "*network of relations*; our being is not locked up inside us but is in fact spread throughout this web of worldly interactions in which our existence continually unfolds" (Fisher, 2002, p. 11). This concept of *experience as interaction and collaboration* has profound implications for a vision of education founded on experiential approaches grounded in the world—the social world, the human-built world, and the natural world. At this point in our human history, it is not a strange thing to pay close attention, be aware of the demands of the natural world, and understand fully that we too are nature, and appreciate the profound implications this realization has on our lives.

Michelle Marshall-Johnson and Betsy Jardine demonstrate this beautifully in their chapter "Keeper of the Living Culture" (Chapter 6, this Volume). The life process is never far from First Nations approaches to education. In an Indigenous world view, music, art, language, science, mathematics—all focus on relationship. As Marshall-Johnson and Jardine show us, learning can never be abstracted from place, from environment, from what is essential to our human *being*. Western approaches to knowledge-building tend to separate out and objectify, thereby denying the essential nature of our emplacement. The authors remind us,

> *Etuaptmumk* is a Mi'kmaw word that means 'Two-Eyed Seeing.' One must see from both eyes, the eye of our own culture and the eye of the Western world view. People must learn Two-Eyed Seeing so that knowledge of the physical is not separated from the wisdom of the spiritual. (Chapter 6, this Volume, p. 85)

We interact with the world through a bodily felt awareness; our experience is an interactive process. Honouring our embodied interaction and learning to listen and focus on what we truly need as human beings to reach our full potential requires an experiential sense and speaks to the cultivation of the dialogical nature of the Living School concept. It is a rejection of a mind/body dualism in which we are isolated from our bodies and living in our heads. If we think about how education was structured not so long ago with children seated in hard desks in serried rows for long stretches of time, the sense of the separation is not hard to grasp. The Living School concept gives authority to education that is based on an organismic wisdom of the experiential and attends to what young people, children, and their teachers are experiencing. It is education motivated by life-forwarding processes, by the creativity that emerges out of the life process where new energy, ideas, and innovation can emerge and develop.

The Living School fosters *contact* and *dialogue* with the world. *Contact* connotes learning from life, of the sense of touch, of being energized and physically moved through our

relationships. Recent pedagogical approaches associated with 21st century learning, such as project-based, real-world, authentic, and deep learning, in many respects, reflect this meaningful contact. By sharing, taking risks, and meeting others, including those others of the natural world, we are changed, and such meaningful contact with the world carries our lives forward. *Dialogue* recognizes the power of language and conversation and the importance of finding one's voice and being truly heard. It speaks to listening to student voices and making room for student agency.

Marshall-Johnson and Jardine (Chapter 6, this Volume) describe the essential value of agency and independence in First Nations education models. Children and youth are given space to come to their own meanings, to take away lessons and learning that are developmentally appropriate. They emphasize the sacred nature of child development through education provided by Elders through dialogue, story and revitalizing the language.

> In the Mi'kmaw society, child development is as sacred as the ideologies associated within the sacred circle. … Mi'kmaw education was provided orally by Elders, the values, customs and traditions were taught through dialogue, storytelling and through living language. (Chapter 6, this Volume, p. 91)

Children are encouraged to do, to try, to fail, and to try again with loving guidance and support, a steady hand to the side but one that does not lead or push or pull from the front. It involves honouring children's inherent, spontaneous interest in the world and celebrating *with* young people their interests, or as David Jardine (1998) points out "their *inter esse*, their being in the middle of things" (p. 80).

Teachers in a Living School are challenged to find, or re-discover, the joy, the mystery, and inherent love in learning about the world to become guides who respect and nurture the integrity of what comes naturally to children—an awe and wonderment for the world. This integrity is also related to pursuing interests across boundaries and across disciplines to follow them where authentic contact and dialogue lead (Howard, 2006, 2011). The Living School recognizes that an *integrated*, holistic curriculum is difficult and messy, yet such a curriculum has an inherent *integrity*—for the two words are related. Yet the wholeness of a curriculum lived *with* children and young people leads to movement, vitality, liveliness, and, yes, difficulty and risk that are generative and life-forwarding. Thus, a Living School, as we have seen in Part I (this Volume), involves approaches to learning that enable students and teachers to be fully engaged in the depth of things in ways that enhance *well-being for all*.

Returning to the Experiential

As we have seen, 21st century learning is grounded in purposeful learning by doing. Teachers are learning designers, partners, and co-learners who enter a different relationship with students to support young people in discovering what it means to connect, thrive, and flourish in a constantly changing world. There is much to celebrate in these new learning goals.

However, the pedagogy of the Living School is built on an expansive sense of human flourishing related to an experiential approach, whereby experience is grounded in our bodily nature and in honouring what it means to be fully human and what our being calls for. Living Schools foster paying close attention and taking meaningful guidance from our experience. The directive powers of bodily felt experience may reveal other ways to think about the structures and aims of education.

Data is available that verifies the large numbers of students who are disengaged from schooling (McKeown & Nolet, 2013), and there is ample evidence of the stark and alarming rise in the emotional and mental health issues among children. Based on a study from 2016, suicide accounts for 19% of all deaths among children aged 10 to 14 and 29% of young people aged 15 to 19 (Centre for Addiction and Mental Health, n.d.). The incidence, severity, and troubling increase in childhood obesity and related illnesses speak to a long history of not attending to an understanding that we too are nature. For much of human evolution, the natural world served as one of the most important contexts encountered during the critical years of childhood development. However, children are spending too much time indoors in the company of screens, and too much time in neighbourhoods and environments antithetical to outdoor play, activity, and exploration on which children depend to enhance ecological health and to be nourished in body and mind. Our current Western society is in many ways antagonistic to the life process and in conflict with the demands of our own human natures. Current cultural practices and the ways many of us organize our lives can be considered life-denying and life-threatening.

John Stewart, whose vision for how a Living School is designed, offers a radically re-imagined educational experience (see Chapter 4, this Volume). Situated in Australia, Stewart describes pedagogical approaches that are firmly e*mplaced* and intended to connect students and children with the *life* of the community. Context is core to pedagogy. Stewart (Chapter 4, this Volume) writes,

> The Context thread allows for experiential project-based learning. There is an intentional progression: we instigate the year with an inquiry-based model. This orientates and refines the skill set required for project-based learning: questioning, collaborating, planning, testing, refining, evaluating and reporting. The second phase is problem-based learning, whereby there remains a scaffold that is group-oriented and frames how learning can evolve and address an identified issue. The third phase is project-based learning whereby the scaffold is peeled back to only three scenarios: a social good, to address an environmental cause, or an entrepreneurial emphasis on developing a sustainable business concept. (p. 64)

Dewey also reminded us many years ago, "Experience is not something which goes on exclusively inside an individual's body and mind" (1938/1997, p. 39). Experience is inherent through bodily engagement and it is also an *interactive* process. Interaction "assigns equal rights to both factors of experience—objective and internal conditions… [and] is an interplay of these two sets of conditions" (Dewey, 1997, p. 42). Our experience directs us toward some sort of contact with the world, and the world calls forth our experience.

The experiential approach inherent in a Living School pedagogy asks, "What interactions with the world does our bodily experience demand of us?" When so many students and teachers struggle to thrive in traditional classrooms organized around principles counter to human flourishing, the Living School offers alternatives to resolving the kinds of challenges that children, youth, and teachers encounter daily in schools. Inquiry-based approaches, new pedagogies, and deep learning as understood through the Living School concept avoids directives, strategies, best practices, or solutions in favour of maintaining that our bodily felt, lived experience of the world points to certain changes in how we think about (and experience) teaching and learning, and encourages us to take actions to move us in the direction of those changes. However, there are many approaches new, old, and ancient that can help educators understand their unique contexts and take the life-forwarding steps to transform schooling for human flourishing and *well-being for all*.

Living Schools reflect the creativity of the life process. The word *creativity* is imbued with the Latin meaning for "to grow, to make" and, again, we see the connection with "to bring forth" (Ayto, 2001, p. 144). Something new and originative is brought forward; new meanings, strategies, and possibilities arise with an understanding of experiential approaches connected to the life process. Creativity reflected in the life process avoids a dependence on ready-made lessons, practices, and policies to nurture approaches that are contextually, culturally, and locally relevant to each school and learning space by acknowledging the uniqueness of communities, schools, teachers, and young people. As Stewart's vision for a Living School reflects, this approach to teaching and learning allows for a high degree of flexibility and myriad options to transform the structures and processes of education.

Living Schools, Learning, and Well-being

> The future of teaching may ultimately center on deeper relationships built between teachers and students, developed through creative, collaborative, socially connected and relevant learning experiences. (Fullan & Langworthy, 2013, p. 14)

The above quotation reflects a hopeful vision for education. The learning goals as presented in 21st century learning documents promote deep learning and new pedagogies to prepare all students to "be life-long creative, connected and collaborative problem solvers" and "happy individuals who contribute to the common good" (Fullan & Langworthy, 2013, p. 2). However, as I discussed previously in Chapter 3 (this Volume), outside these broad strokes, the authors of 21st century policy papers and curriculum documents generally avoid any explicit discussion of the larger purposes and aims of education beyond deep learning, problem solving, creativity, innovation, and being happy, healthy, and good citizens. Rosanna Cuthbert's (Chapter 5, this Volume) description of the Sigurbjorg Stefansson Early School (SSES) demonstrates how the gaps in 21st century learning can be filled with an explicit focus on deepening relationships not only within the learning community but with the natural living ecosystems within which the school and the community is situated.

Children are given ample opportunities to express their natural interrelatedness and relationship. In example after example, Cuthbert illustrates how teaching and learning can occur outside the school in a mutually sustaining relationship. The walls of the school become permeable, the inside and outside flow into each other in a true spirit of inclusion, student-centred learning, and differentiation. This is not an environment that children simply pass through without being able to inhabit.

Living Schools encourage the community to ask the big questions against the backdrop of current realities and attempt to formulate a larger vision for the schooling experience of children, youth, and teachers. Education is typically described as preparing children and youth for the future. But what kind of future? Without listing the myriad challenges facing our world, the prospect of irreversible climate change, mass migrations of people across borders, local issues related to meaningful employment, affordable housing and child care, to the increasing incidence of physical and mental health issues being documented in Western countries, suffice it to say that education and schooling are called on to clearly articulate a response. Teachers too are not immune to stressors and maladies inherent in our Western culture as it presents itself today. Schools are becoming challenging work environments with increasing demands, and teacher wellness is emerging as a huge issue in education. Teachers also suffer in schools as they are currently conceptualized and configured. A clinical epidemiology study concluded that the results "presented [a picture] of a profession that demanded constant attention often to the detriment of participants' health and well-being" (Younghusband, 2005, p. 135). In the intervening decade since the study was conducted, it is reasonable to assume that the demands of the teaching profession have only continued to increase (Greenberg et al., 2016). Our experience is grounded in our bodily nature, and our felt intentions manifest and demand something from us that is not currently being met.

Cuthbert's (Chapter 5, this Volume) description of the effect of adopting a Living School approach had on teachers in the school offers educators great hope:

> Teachers began to embrace this multidisciplinary approach and passionate testimonials permeated through the hallways and classrooms of our highly collaborative school. It felt as though everyone wanted to be immersed in this feeling of wonder and fulfillment—a sense that our teaching and learning was not only relevant, purposeful, and engaging, but was enhancing the quality of our lives, helping us to become more deeply connected with ourselves, each other, and our environment. We started to ask questions of ourselves, not just our students, and began reflecting and rethinking our current routines and practices. (p. 71)

> This culture has become entrenched in the daily life of our school, and it would be impossible for many of us to abandon these practices due to the insights gained and the success our students have achieved in all aspects of their academic and social emotional learning. We continue to welcome many educators from inside and outside of our province who are intrigued and inspired by our success with infusing inquiry, education for sustainability, and deeper learning into the provincial curriculum. (p. 72)

The ethos of a Living School reflects the values of sustainability and *well-being for all*. The values are explicitly integrated into the learning process without jeopardizing the veracity of facts, data, reason, and logic. Knowledge and learning cannot be understood as ends unto themselves, but rather as means to human well-being. The knowledge, skills, habits, and dispositions that will allow us to meet present and future challenges, and to survive and to live with respect and restraint in our places, guide us in how we can re-imagine the structures, processes, and aims of education. How can we teach interrelatedness and systems thinking without understanding humans as part of the whole and not in any way separate from it? How then does personal wholeness and well-being affect the physical settings and spaces within schools? How can a deeper understanding of an experiential approach to learning honour our bodily interaction with, and integration in, how and what we learn?

Conclusion: Coming Back to Life

Living Schools foster relationships with the larger living world through contact with others and the other-than-human, in an ethos of care and in ways that are life-forwarding and responsive. They cultivate experiences that come back to life, and the life process to provide children and teachers the opportunity to develop vital relations with the world. Time, space, and being are organized as a living responsiveness to what our human natures call for to realize our full potential as flourishing and contributing individuals. For both children and teachers to thrive in schools, they must be places that pay close attention to our bodily engagement with the world and attend to what the intelligence of embodiment implies and calls for, whether that is physical, social, emotional, developmental, or spiritual.

Teachers in classrooms, principals responsible for organizing schools, and board members and government personnel who shape policy can make choices every day that reflect the ethos, attributes, and practices of Living Schools (Howard & O'Brien, 2018). Educators who are awake to another vision, and aware of a different way, for teaching and learning built on human becoming, can exert an enormous influence on engendering humane, life-forwarding approaches to schooling. When education is based on the life process and organized on life-forwarding principles grounded in the world—the social world, the human-built world, and the natural world—contact, dialogue, and relationships are fostered in ways that enhance a deeper understanding of what and how we need to teach and to learn to promote *well-being for all, sustainably*.

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Chapter 14

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

CHRIS ADAM & ROBERT CASSIDY

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.

(see http://creativecommons.org/licenses/)

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

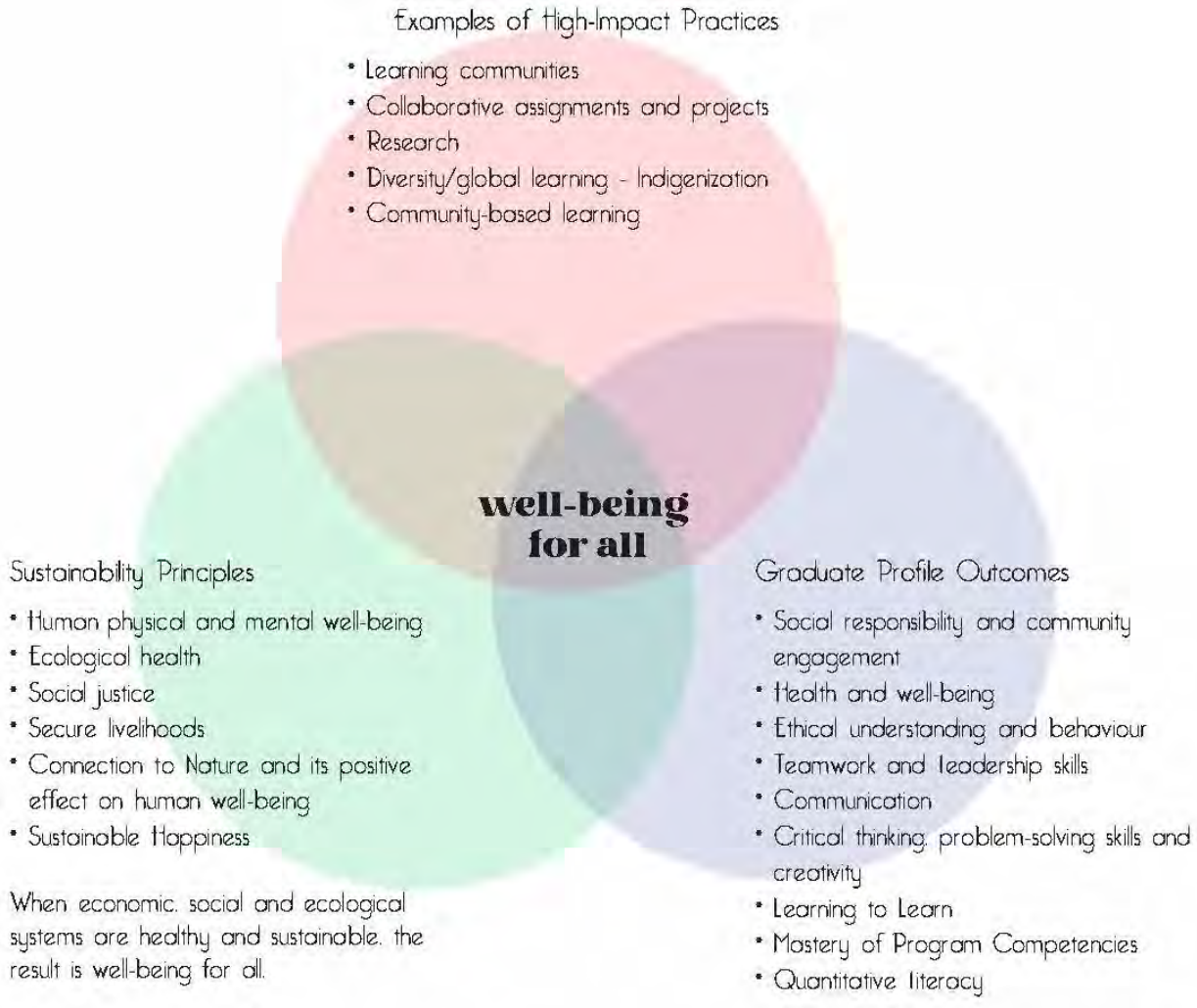
Note: R. Turner (Photographer); copyright Dawson College, reprinted with permission

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 & Sauvé, 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?

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[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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Chapter 15

Health and Well-Being: Developing the Emotional, Physical, and Spiritual Well-Being of Students, Staff, and Teachers

PATRICK CARNEY & CATHERINE O'BRIEN

During this past decade we have seen an increasing emphasis on student well-being as a focus for education, in addition to, and some would say equal in importance to, academic achievement. This coincides with parental values. Parents will readily tell you that what they want for their children at school is for them to be happy, to fit in, and also to learn. From a psychologist's vantage, this explicit emphasis on well-being has coincided with approximately two decades of research on the concept of "positive psychology."

While clinical psychologists had developed many therapies to treat the symptoms of mental health disorders during the past 50 years, the therapeutic benefit was primarily studied in relation to a reduction of suffering. As wonderful as the successes of clinical psychology have been in relation to mental illness, there was little attention paid to whether those relieved of their symptoms actually attained a significant level of happiness and what has been referred to as positive mental health. Additionally, psychologists were interested in finding out more about what makes each of us mentally and authentically happy. The Public Health Agency of Canada (PHAC) has provided one of the better definitions of positive mental health as "the capacity of each and all of us to feel, think, and act in ways that enhance our ability to enjoy life and deal with the challenges we face. It is a positive sense of emotional and spiritual well-being that respects the importance of culture, equity, social justice, interconnections, and personal dignity" (PHAC, 2006, p. 2).

The development of a concept for positive mental health as being more than the absence of psychological symptoms followed an era where there had been a dramatic shift in what was meant by optimal physical health or "wellness." The World Health Organization made mention of "wellness" in its constitution of 1948, stating that "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." However, the term did not obtain traction in the health science literature until the 1980s before it achieved standard usage in the health sciences and the popular press in the 1990s (Zimmer, 2010).

Most social scientists and educators who are now focused on the well-being of students draw heavily on the findings from the field of positive psychology. Positive psychology research has contributed important conceptual understandings and outcome strategies related

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C. O'Brien & P. Howard (Eds.). (2020). *Living schools: Transforming education* (pp. 183-196). Winnipeg, MB: ESWB Press. ISBN 978-0-9939534-2-2. Retrievable from www.ESWB-Press.org

to such concepts as character strengths, authentic happiness, gratitude, optimism, spirituality, hope, compassion, self-esteem, self-compassion, self-regulation, and, yes, well-being.

The infusion of mental health literacy in our schools during the past few years had an initial focus on identification and support for those students experiencing, or at risk for, mental illness. Research tells us that one in five people in Canada will experience a mental health problem or illness in any given year and that 70% of adults who were experiencing mental illnesses reported that they had experienced onset of those illnesses in childhood (Mental Health Commission of Canada, 2019). Following an initial focus on identifying and supporting those who were experiencing distress, more attention could be paid to positive mental health promotion for the *well-being of all*, including those experiencing mental illness.

In the book *Well Aware: Developing Resilient, Active, and Flourishing Students*, Carney (2015) developed a model for well-being based on strong health outcome research from four major areas. These were the areas of:

- social emotional learning skills (the Resilient component),
- healthy active lifestyles (the Active component),
- positive psychology (the Flourishing component), and
- strong caring relationships (the Relationship component).

An essential feature of this well-being model is that relationships are depicted at the centre of a Venn diagram where the circles representing Resilient, Active, and Flourishing overlap, giving considerable prominence to Relationships. When we consider this evidence-informed model within the added dimension of *well-being for all, sustainably* in Living Schools, the concept of well-being becomes even more robust. It is quite obvious that well-being that is premised on personal gain without regard for others or the environment is shortsighted and may reap personal hardship or suffering later, as the planet continues to heat.

There is much work to be done, and education has a significant role to play to develop the culture of *well-being for all that also understands well-being from a sustainability perspective.* In addition to environmental disasters, political conflicts, and climate-change concerns, the earth needs remedies to feed the populace. According to the UN, there are approximately one billion people hungry at present. The world population has tripled since 1950 and it is a challenge to feed the current 7.5 billion individuals on the planet within current unsustainable food systems. Estimates by the UN Food and Agriculture Organization are that by 2050 or 2060 there will be another 2.5 billion to feed (McDonald, 2019).

Aside from these urgent challenges, the common purpose and meaningful learning inherent in a Living School exponentially heightens the sense of community, hope, joy, and meaning (well-being) for all those participating. From the case studies we see a rich terrain for resilient, active, and flourishing students connecting with teachers and with each other in strong, caring relationships.

In the Well Aware Model, the "Resilient" dimension is based on well-established research concerning the positive outcomes for teaching specific social-emotional learning (SEL) skills and developing positive attitudes, such as grit and optimism. SEL is how children learn to

understand and manage emotions, set goals, show empathy for others, establish positive relationships, and make responsible decisions. These have been well-catalogued by the Collaborative for Academic, Social, and Emotional Learning (CASEL) in terms of five connected sets of competencies (CASEL, 2019):

- self-awareness
- self-management
- social awareness
- relationship skills and
- responsible decision-making

Students come to school with varying social-emotional skill levels from their home and community life. They further develop these skills through their interactions with each other in what can be a rich social context of the school environment with a caring teacher who connects with each student and purposefully models, responds to, and guides the students in SEL across the curriculum and throughout the school day. The Living School environment provides unique opportunities to learn these skills to enhance positive emotional experiences as well as building the required resiliency to withstand negative emotional experiences and the mental health challenges of life.

Consider the example from *Learning Naturally* at Sigurbjorg Stefansson Early School in Manitoba (see Chapter 5, this Volume), where a little boy in grade one exclaimed that he had "made friends with the rain today" as he burst in from an outdoor learning excursion. His teacher was responsive to the child's delight and we are told that she used this opportunity to capture the reverberating awe and excitement that ran through her multi-age classroom. The lad was encouraged to share his exuberance and joy with his peers during their daily sharing circle, followed by a learning journey encompassing states of matter, seasons and changes, the water cycle, patterns in Math, poetry, art, and movement. Inquiry-based learning can be so captivating and positive emotions can be seized upon to enhance the joy and sense of meaning for all through their learning. Those of us who have participated in classrooms that utilize the milieu of caring circles[1] regularly will understand how the circles can be used very effectively to further teach all of the SEL core competencies. Students learn to find their voice in a group, to take their turn, and to share perspectives and feelings respectfully. Over time, such sharing in the circle creates a deepening sense of caring for each other, a deeper sense of relationship with each other, and a deeper sense of community. Patterns of bullying are unlikely in classes where students have developed respectful and caring relationships (Pepler & Bierman, 2018).

[1] Indigenous cultures, including First Nations, Inuit, and Métis peoples, use many types of circles including trust, healing, sharing, and justice circles. Many teachers start their day by sitting students in a circle, on the floor or on a chair with nothing in front of them, and giving students the opportunity to take turns in order to share something from current events or something that is going on with them personally. This physical structure and open dynamic has proven to foster a greater sense of community and caring (Carney, 2015, p. 44).

Experienced teachers can use the circle to help students learn how to solve problems, share divergent points of view, and even resolve conflicts.

The "Active" dimension of the Well Aware Model is also enhanced in a Living School, as evidenced by the outdoor learning excursion in Sigurbjorg Stefansson Early School, as well as other case examples in the preceding chapters in this Volume. Having nature- and place-based learning as a specific attribute and practice in the Living Schools framework (Howard & O'Brien, 2018; see also Chapter 1, this Volume, p. 4) ensures a higher level of movement than learning that is mostly restricted to the desk. Regular hands-on learning in the outdoors ensures functional movement. Students can be taught to use their learning environments to help achieve balance among the four basic activities of sitting, sleeping, walking, and getting more intensive exercise. With a focus on well-being, students can learn about the scientific basis to the Canadian 24-Hour Movement Guidelines for children and youth published by the Canadian Society for Exercise Physiology (CSEP, 2019; see Figure 1).

The "4" symbol by CSEP, with the longer column for sleep, illustrates that we need to spend more time sleeping in a day than any of the other three categories. Likewise, we need to minimize sitting to be the smallest category of activities. Too much deskwork puts us all at risk for ill health. Some refer to sitting as "the new smoking" in terms of health research findings about the consequences of too much sitting.

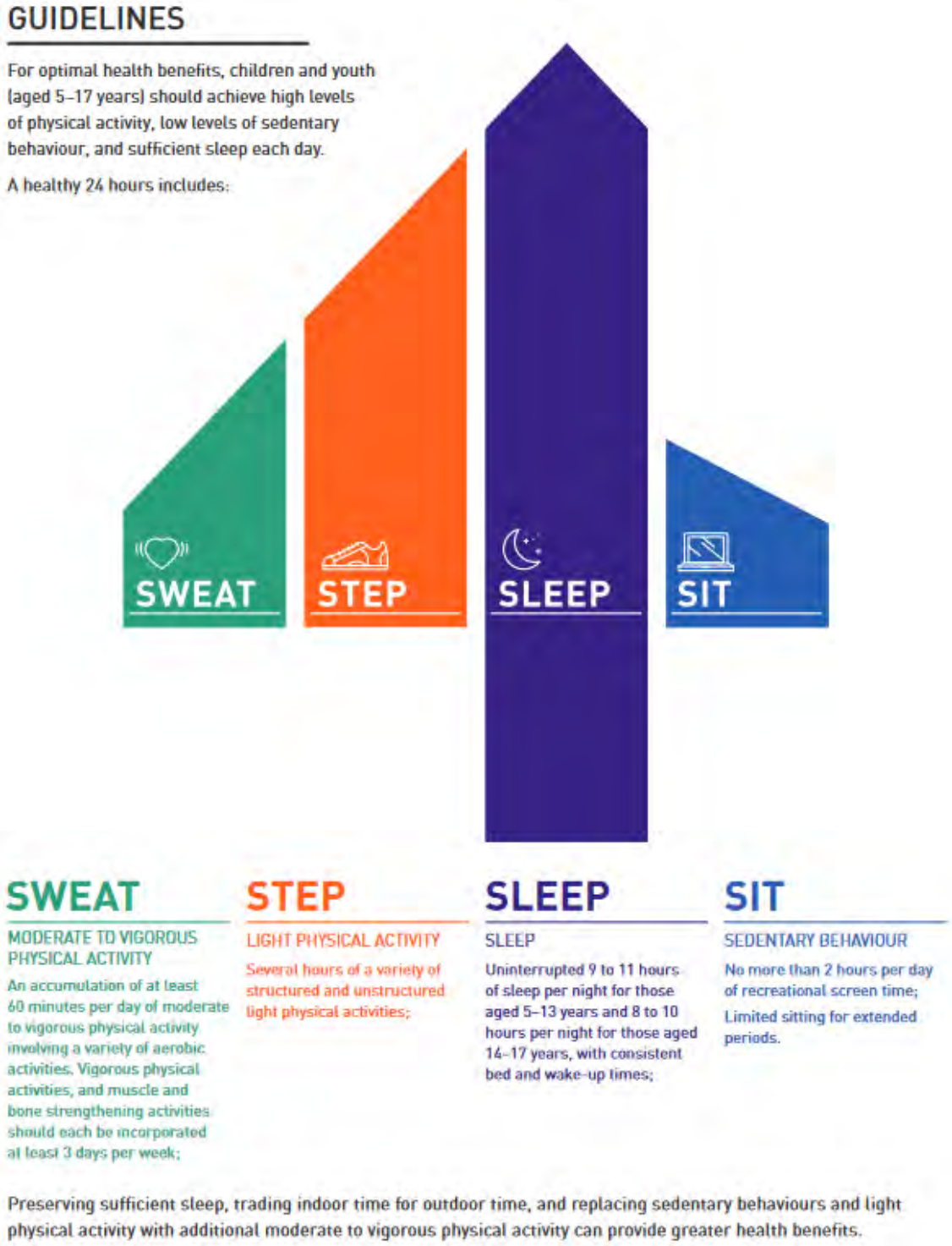
Needless to say, some of us are challenged to minimize sitting adequately in our online, screen-oriented society. CSEP is a great source of facts concerning the physical and mental benefits of a balanced lifestyle for exercise, sleep, stepping, and sitting. Their research demonstrates how following the guidelines is associated with:

- better body composition,
- cardiorespiratory and musculoskeletal fitness,
- academic achievement and cognition,
- emotional regulation,
- pro-social behaviours,
- cardiovascular and metabolic health, and
- overall quality of life.

In the Well Aware Model, "Active" also includes active engagement in activities that serve up healthy nutrition and opportunities to further develop spirituality. As we know from previous chapters in this Volume, the Living Schools framework incorporates a healthy relationship with locally grown food and food preparation. This is consistent with the recently revised Canada's Food Guide (2019), which puts much more emphasis on learning to prepare foods than the previous version of the guide. Learning to prepare food establishes lifelong skills for nutritious eating habits as opposed to habits of dependency on processed foods.

Figure 1

Canadian 24-Hour Movement Guidelines for Children and Youth



From CSEP's Canadian 24-hour Movement Guidelines for children and youth, 2019 (https://csepguidelines.ca). Reprinted with permission.

The "Flourishing" dimension of the Well Aware Model is based on the work of Martin Seligman (2011), often referred to as the father of positive psychology. In his book *Flourish* (2011) Seligman attributes optimal well-being or flourishing on five elements, derived from his review of a decade of research in positive psychology. Each of these elements are considered to have a stand-alone contribution to well-being, as well as interactive or integrative contributions. A student who is flourishing is one who experiences one or more of the following:

- Positive emotion (fun and enjoyment)
- Engagement (passionately absorbed; "in the flow")
- Relationships (positive)
- Meaning and purpose (culture, spiritual)
- Accomplishment and competence

These 5 elements have been referred to using the acronym P-E-R-M-A for ease of remembering.

Once again, it is evident that Living Schools can provide copious opportunities to promote well-being through lifestyle experiences that engender positive emotion, engagement, meaning, accomplishment, and positive relationships. This, in addition to the opportunities for SEL skill development and an active lifestyle mentioned above.

The strong, caring "Relationships" dimension is central to the Well Aware Model. What does the research literature tell us about positive and effective teacher student relationships? A review of the literature by Rimm-Kaufman and Sandilos (2011) indicated that effective teachers:

- show pleasure and enjoyment of students,
- interact with students in a responsive and respectful manner,
- offer students help (e.g., offering support that matches students' needs) in achieving academic and social objectives,
- help students reflect on their thinking and learning skills,
- know and demonstrate knowledge about individual students' backgrounds, interests, emotional strengths, and academic levels,
- avoid showing irritability or aggravation toward students, and
- acknowledge the importance of peers in schools by encouraging students to be caring and respectful to one another.

Teachers who develop strong relationships with their students help their students to feel connected. School connectedness is the belief held by students that adults and peers in the school care about their learnings as well as about them as individuals. School connectedness has been shown to be an important protective factor. Youth who feel connected to their school

are less likely to engage in many risk behaviours, including such things as early sexual initiation, alcohol, tobacco and other drug use, and violence and gang involvement (Centers for Disease Control and Prevention, 2009). The vast majority of us can think of teachers who had a positive influence on us. When teacher interactions with students are characterized by genuine empathy, care, and affirmation, they contribute positively to mental well-being and academic success (Joint Consortium for School Health [JCSH], 2010).

Over the past few years, we (the authors) have been learning from one another as we have discussed well-being in schools, *well-being for all*, and Living Schools. We see an opportunity to enhance Carney's Well Aware Model by making explicit connections to *well-being for all*. The well-being of resilient, active and flourishing students who enjoy strong, caring relationships with each other and their teachers can be understood to be interconnected with the well-being of other people, the wider community, and the natural environment.

Casting the Well Aware Model within the context of *well-being for all* extends the well-being discourse. When we consider the central role of Strong Caring Relationships, the enhanced model now includes caring for other people and the living world—a natural fit with Living Schools. It means that when we are seeking a lifestyle balance, we do so with the needs of other people and ecosystem health in mind. For example, good nutrition takes on new meaning when it is paired with sustainability. Where did the food come from? How was it grown? How is it packaged? How might meeting our nutrition needs enhance environmental health and well-being? Edible education (see Chapter 9, this Volume) offers an ideal platform for this learning and for reflecting the Living Schools attribute of "exploring the links between human health and the natural world" (Howard & O'Brien, 2018).

We learned from Jardine and Marshal-Johnson (Chapter 6, this Volume) that Mi'kmaw educators incorporate spiritual well-being with respect for nature:

> The kids wanted to give back, to protect trees and celebrate their spirit. We gathered acorns and with the help of Strathlorne Nursery the students planted over 400 oak trees. When the acorns sprouted two years later, the students transplanted the seedlings into large pots. They gave the trees away to folks who pledged to write a poem of commitment to the tree, vowing to allow it to live out its life without fear, under their protection for their lifetime. (p. 85)

Emerging research on children's exposure to green space and mental health suggests that green spaces may offer a protective factor. A Danish study looked at one million adults and their childhood neighbourhoods, assessing the amount of green space. The study found that "high levels of green space presence during childhood are associated with lower risk of a wide spectrum of psychiatric disorders later in life" (Engemanna et al., 2019, p. 1). The authors concluded that, "Our results show that green space during childhood is associated with better mental health, supporting efforts to better integrate natural environments into urban planning and childhood life" (Engemann et al., 2019, p.1). Chapter 14 discusses the association between well-being and connecting with nature in greater depth.

Flourishing that contributes to *well-being for all* underscores the significance of considering the positive or potential adverse impacts of the choices we make, rather than assuming that flourishing is always inherently good no matter how it is achieved. This also draws our attention to the extraordinary opportunities to enhance well-being through interactions with other people and the natural world. Carney, Graham-Clay, and Duck (2019) and Beal (2016) describe the heightened sense of community, joy, and meaning for students, staff, and families at their school board as a result of a global, social-justice action project. Traveling high school students and staff have been reaching out to do such things as build schools, dig wells for water, and exchange cultural knowledge with others from their global family. The project has continued for more than 10 years and by August 2019, more than 1,600 students and staff from the Simcoe Muskoka Catholic District School Board (Ontario, Canada) will have answered a call to action with trips to Kenya, Ecuador, India, Tanzania, Nicaragua, Ghana, or Israel. This is a credit-based, experiential-learning, social-justice program. This large-scale project has involved a discernment process for participating staff from all levels of the organization, including classroom teachers, educational assistants, office and clerical staff, school administration, and psychologists. The project was designed in relation to the strategic plan of the board. Families throughout the board contribute to fundraising projects to help cover the costs. Just one example of the sustainable well-being aspect of this endeavour can be witnessed in how one of the country governments provided a teacher for each newly built school. Furthermore, the construction of a well for drinking-water allowed female children to attend these schools along with the males, having been relieved of their duties to fetch water from a great distance. In his book *Flourish*, Seligman (2011) describes "meaning" as "belonging to and serving something that you believe is bigger than the self" (p. 17). Students returning from these social-justice project journeys often describe their experience as life-changing, in terms of their perspective on what is important and their career goals going forward.

The importance of student resilience is a frequent topic of conversation amongst educators. In recent years, through discussions with educators, we hear their concerns that students seem to lack resilience and perseverance. That they are more likely to give up too easily when faced with challenges. The skills that are outlined in the Carney model indicate that these traits are integral to student well-being; skills that are developed when students feel the accomplishments of making a difference with real-world challenges, such as the students at Featherston Drive Public School do through Shannen's Dream, or the high school students profiled in Chapter 3 (this Volume) from Riverview High School in New Brunswick, where:

- Students begin with a real-world problem of interest to them. This provides both context and motivation for them to learn the concepts and skills they need to address the problem.
- The project format pushes students to take the initiative to identify what they need to know, and then to go out and find the information.
- Over the course of a long-term project, students gain experience at giving and receiving feedback, reflecting on this feedback, and revising their project.

- The project leads to a definite outcome, a new idea, action, or object that is the product of students' effort.
- Students learn to present this product to a public audience, gaining valuable experience at public speaking and the arts of presentation.
- The knowledge that they will present their results in public helps motivate students to do their best work. (p. 38)

Educator Well-Being

The Living Schools framework includes teacher and staff well-being. The concern regarding teacher well-being is well documented.

> Teacher attrition and burnout is a significant problem in North American education. Burnout is known to be a leading factor in teacher turnover (Valtierra, 2016). A small-scale Quebec study, conducted by the provincial teachers' federation, showed that nearly half of teachers suffer from anxiety and that 23% planned to leave the profession within five years (Fédération Autonome des Enseignants, 2010). (McIntyre, 2019, p. 8)

In a path-breaking study, McIntyre explored the connection between outdoor learning and teacher well-being. Her study with Canadian educators found that:

> outdoor learning is a "new pedagogy" that contributes to relationship-building, fulfilment, meaning and engagement for teachers. It also allows teachers to connect with Nature, which is an essential contributor to well-being. If adequately supported in schools and through curricula and policy, outdoor learning could be a way to counter teacher attrition and contribute to sustainability education and well-being for all. (2019, p.2)

A resounding commonality amongst all of the Living Schools that have been presented in this book is that the educators in these schools are thriving. This doesn't mean that all of them are thriving all the time. As O'Brien and Coyne told us in Chapter 8 (this Volume) that

> the process of figuring out what defines us and guides our practice has allowed us to be honest and reflective as a school community. We are not without our challenges and are not immune to the stress and challenges of teaching. We came to the conclusion that to be a Living School all comes down to the fact that *we are a group that values and invests in positive relationships with others and with the earth.* (pp. 115-116)

Carney (2015) has developed a checklist for teacher well-being:

- Teacher well-being is recognized as an important and positive goal.
- The importance of social emotional skills for teacher efficacy and well-being is acknowledged and supported.
- Teachers give attention to lifestyle balance and personal well-being strategies.
- A caring, inclusive professional environment encourages belonging, commitment, trust, professional autonomy, and positive collaboration.
- Individual strengths are recognized, differences are respected, risk-taking and effort are acknowledged, and teachers have a voice in decisions.
- Teachers are engaged in regular opportunities for meaningful professional learning. (p. 200)

What can individual teachers do? An important place to start is to address self-care.

> Teaching is a *giving* profession. People who are drawn to be educators and who love teaching enjoy helping others. Finding the right balance between giving to others and oneself is essential though. Otherwise educators may neglect their own well-being to the point of depletion or even burnout. (O'Brien, 2016, p. 102)

Working with Seligman's (2011) PERMA model, O'Brien (2016) created teacher well-being self-assessments for personal and professional well-being. (These are included in the Appendix.)

O'Brien has also explored sustainable happiness and sustainable well-being with the educators she teaches. She created a Sustainable Well-Being Framework (O'Brien, 2017) to facilitate this process. The framework and a detailed description of each element are outlined in Figure 2 (see below).

One application of the Sustainable Well-Being framework is to invite educators to respond to the following questions.

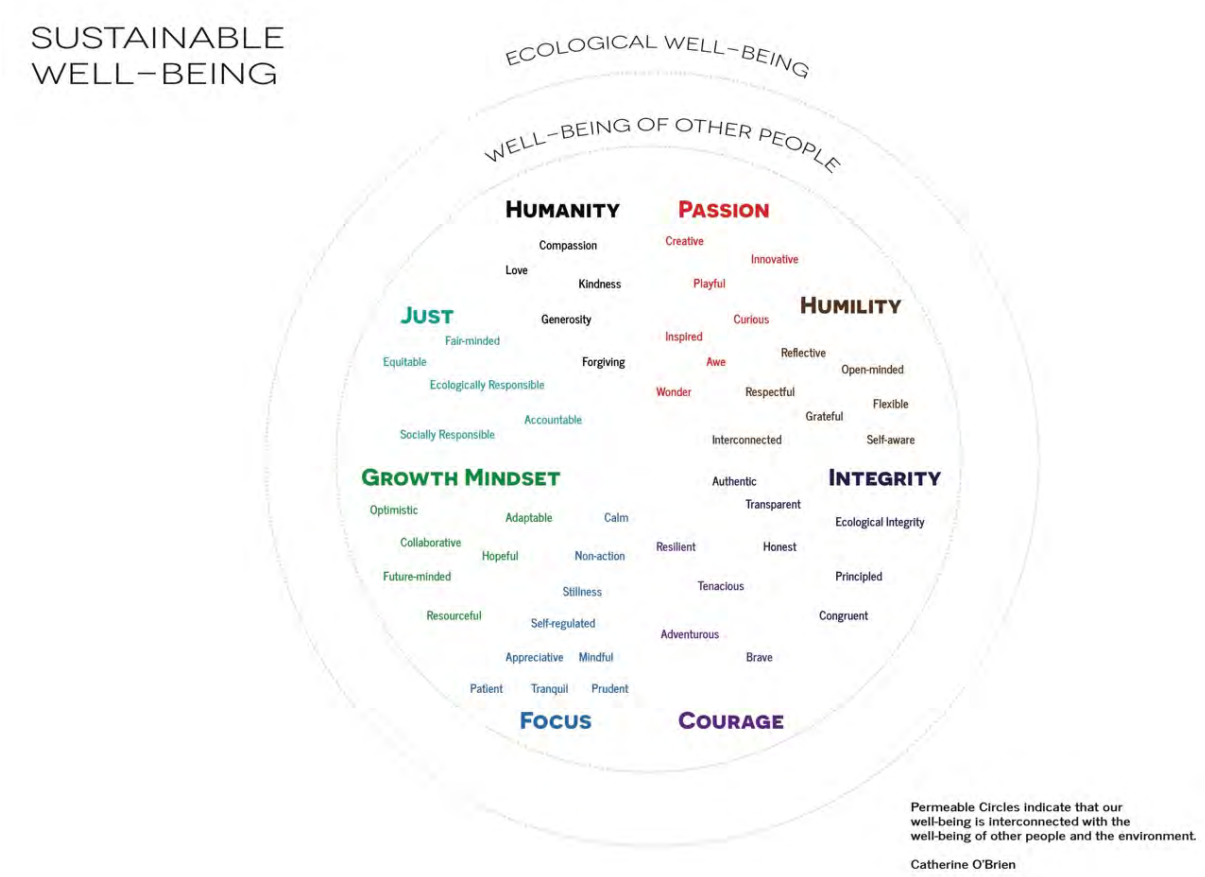
- Looking at the Sustainable Well-Being (SWB) framework identify at least one area that you are especially proud of in your personal life. Identify at least one area that you are especially proud of in your professional life. Identify at least one area where you would like to develop further in either your personal or professional life and suggest steps that you will take towards this.
- Consider a challenge that you have faced that did not work out well. Are there any attributes in the SWB framework that might have assisted you to have a better outcome?
- Consider a challenge that you have faced that worked out well. Which attributes do you think contributed most to this outcome?

The Sustainable Well-Being Framework can also be applied to one's lifestyle (see the Appendices for further applications of the framework).

In Chapter 3 (this Volume), we learned that leading educators are referring to this as the Age of Learning, Well-Being, and Identity (Hargreaves et al., 2018). Living Schools are consistent with this forward thinking and expand upon it as we acknowledge that we are co-learners, that well-being needs to include all people and the living world.

Figure 2

Sustainable Well-being



Note. This figure is from "Sustainable well-being and well-being for all," by C. O'Brien, 2017 (http://sustainablehappiness.ca/sh-extra/sustainable-well-being-and-well-being-for-all/).

> **Sustainable Well-Being** – This includes physical, emotional, and spiritual well-being.
>
> **Humanity** – A natural assumption might be that words such as "compassion" or "empathy" are directed solely towards humans but the intention is to suggest that all of the elements are applicable to people, including one's self (self-compassion), and "other than human" beings that make up the living world—and that our humanity will be enhanced by embracing these attributes.

Passion – Within the passion sector we see attributes that contribute to inspiration. For instance, we can imagine that having a sense of awe or wonder can contribute to our well-being and may inspire us to cherish, create, and safeguard places that touch us in this way.
Humility – Most of the terms here are fairly self-explanatory. Interconnected was included because understanding that we are interconnected with others and Nature requires humility. Understanding that we can learn from Nature requires humility.
Integrity – This is a term that arises in most of the discussions about character. However, as noted earlier, these discussions are almost always anthropocentric. Ecological integrity was included to reinforce perspectives from the Earth Charter and the notion that we need to act with integrity towards the biosphere. Honesty is also an important attribute named in Indigenous teachings such as the Seven Grandfather teachings (Georgian College Aboriginal Resource Centre, 2014). Congruent is there to reflect the idea that it is important to have congruency between who we are and how we live.
Courage – In addition to other descriptions that have been used for courage, "adventurous" was included to capture a sense of taking risks. The other terms related to courage in character models such as the Peterson and Seligman (2004) classification seem more dutiful and lacked a sense of play.
Focus – This dimension was recommended from Eastern colleagues who found that character frameworks struck them as having a Western perspective. In their view, attributes such as mindfulness, stillness, calm, and non-action were particularly important to include as a counterbalance to more outwardly oriented attributes or ones that suggest ambition and drive.
Growth Mindset – One of the key barriers to change in organizations seems to be the individuals who want to preserve the status quo and place obstacles in the way of positive change. They tend to be problem-focused, rather than solution-focused. The same thing happens for individuals who get "stuck" by a life challenge because they have not learned how to generate options to move forward.
Just – The elements here are self-explanatory.
Outer Circles – The outer circles indicate that our well-being is interconnected with the well-being of others and ecological well-being. Our choices impact their well-being and their well-being impacts us. One drawback to this arrangement is that it can appear that ecological well-being is on the outside, separate from us. Rather than thinking of the circle as the outer rim, it would be best to think of each circle embedded within one another so that we are embedded in the well-being of others and Nature—and they are embedded in us. (O'Brien, 2017)

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Conclusion

Additional Insights and Next Steps

CATHERINE O'BRIEN & PATRICK HOWARD

Throughout this book we have heard from educators who have varying levels of expertise on Living Schools. Some are referring to their school as a Living School, others are recognizing that their practices align with Living Schools though they hadn't previously used that term. Each of the case studies presents a unique portrait and is meant to underscore the fact that there isn't a prescribed standard to follow. Our aim has been to offer a framework that educators can use to reflect and guide them, applying and adapting the attributes and practices to their particular context.

Taking this exploration a step further, we reached out by email to some of the authors in this book as well as other educators who are familiar with Living Schools to pose questions about their personal experience with their practice. We contacted Rosanna Cuthbert, the principal at the Sigurbjorg Stefansson Early School in Manitoba (author of Chapter 5, this Volume); Julie Van Caeyzeele, an elementary teacher in Manitoba, who is explicitly striving to have a Living Classroom; Brent Kay, who is a former superintendent for schools in Vermont (author of Chapters 7 and 12, this Volume); as well as Jennifer de Vera, who works in the Sustainability Office of Dawson College in Montreal and spearheaded the development of a Living Daycare program at the daycare on the campus. Here's what they shared with us.

Rosanna Cuthbert
Principal, Sigurbjorg Stefansson Early School, Manitoba[1]

How do you and your staff ensure that the journey you began is sustained and will continue to be sustained?

I have thought about this question and have had this discussion on many occasions with my Assistant Principal who has been instrumental in leading this journey, especially in terms of future school leadership. I am quite optimistic because I believe there are several components that make this transformation sustainable.

[1] See Chapter 5 (this Volume) for more about this school.

(see http://creativecommons.org/licenses/)

C. O'Brien & P. Howard (Eds.). (2020). *Living schools: Transforming education* (pp. 197-207). Winnipeg, MB: ESWB Press. ISBN 978-0-9939534-2-2. Retrievable from www.ESWB-Press.org

One of the main reasons is that when teachers became inspired and felt supported to step outside of their comfort zone, they began to reflect at a deeper level on their daily pedagogical practices in collaboration with their colleagues. Empowering students to become academically, intellectually, and social-emotionally engaged has not only enhanced our teaching and learning school culture but also our pursuit of academic excellence. Shifting our professional stance from what is often referred to as a deficit model of education towards a strength-based, more holistic approach has been transformational also for the well-being of our students, our staff, and many of our families.

When striving to embed the many layers of complexity inherent in deeper learning cultures, the research-based pedagogical practices that have become more prominent have not only aligned but complemented one another. As a school, we have never departed from good teaching practices and the traditional aspects of teaching and learning which prioritize the foundational literacies of reading, writing, and math. These foundational skills are enhanced and strengthened by weaving in contemporary learning competencies such as creativity, collaboration, communication, citizenship, and character.

Teachers consistently share how designing their lessons to incorporate opportunities for students to employ these competencies while provoking curiosity and wonder leads to greater student success. Teachers have reported that many of their students often exceeded initial expectations for achieving curricular outcomes and there was profound evidence of learning in one subject area being transferred into other areas of the curriculum. A strong sense of efficacy emerged in the teachers, students, and me as the principal, which continued to gain momentum and create a seismic shift in the culture of our school community.

New staff and visiting educators exploring ways to foster deeper learning into their teaching and leading help to keep this deep-learning professional dialogue at the forefront of our conversations and thoughts, despite different entry points and perspectives. It became the culture of our school to collaborate, visit each other's classrooms, and welcome other educators who wanted to learn more about deeper learning and our school's vibrant teaching and learning culture. Through these visits and collaboration, in addition to our own school plan and professional journey, we continuously reflect and immerse ourselves in our own inquiry towards deeper learning.

Many teachers have stated that they could never return to their previous way of teaching because of the insight they have gained on how they believe students truly learn and flourish as contributing citizens in society. I also appreciate feedback from other educators around the province who have either visited our school, attended presentations, followed our classes on social media, or engaged in conversations with our teaching staff at various professional development sessions, who express passionately how their teaching has been positively impacted because of what they have observed in our classrooms and our school. The strong evidence of student success and the well-being of our students in our school data and learning-walk observations are compelling.

When you talk with other administrators, what do you share with them and what are they most interested to know?

I think it is important for other educators to know that our deep-learning focus does not compromise our focus on academic excellence but rather creates the space for high achievement in all dimensions of students' lives. Everyone is able to thrive in a teaching and learning culture that also values social justice, inclusion, equity, and human flourishing. As educational leaders, I believe we must uphold our professional and moral integrity and not succumb to many of the political pressures that resort to seeking quick fixes for very complex issues. Although foundational literacies, such as reading, writing, and math, are critically important, students will become more empowered when these skills are developed alongside other essential competencies, such as critical thinking, creativity, collaboration, communication, and citizenship. A reliance on compliance, conformity, and competition impedes success and diminishes the quality of life for all students.

We welcome educators and school visits from all over the province (teachers and administrators, student services, etc.) who are interested in observing and engaging in professional dialogue with staff regarding the infusion of contemporary competencies, multi-age classes, flexible learning environments, inclusion, gardening, and education for sustainability. Some have also come to see our new nature playground, which was recently constructed to complement our outdoor classroom, greenhouse and raised garden beds. In addition to administrators, consultants, and student services teams, one division sent their entire cohort of music teachers to inquire more about our musical literacy initiatives and often educators request to return with a new group of interested colleagues. Although we ensure that we are not inundated with school visits by adhering to a monthly quota, many staff have shared that they see a benefit in these visits as the questions and observations often cause them to reflect more deeply on our pedagogical practices.

When I present, I try to convey how we have been involved in our own professional inquiry and learning, each year delving more deeply into focus areas such as the arts, education for sustainability, and contemporary competencies. I talk about how it began as an invitation to learn more about ways to make teaching and learning more relevant, authentic, and joyful and it gained momentum because of the academic successes and enhanced well-being of students and staff. I have found many of the questions posed to me fascinating, because in many cases I had not realized how some of these pieces were catalysts for the successes we are experiencing. School budgets are always discussed, and although this is a lengthy topic, one of the things I share is that as a society or organization, how leaders spend or allocate our money delivers an important message about what we value. I provide teachers with a sufficient classroom budget to purchase rich resources that are readily accessible to all students. I love that students have high quality, communal school art supplies and beautiful art supplies as it sends a message to our students and families that we all belong and are a community of learners.

I am always asked how I implemented this vision and whether or not it was mandated. This is such a great question and I marvel at how I simply extended an invitation to staff to

learn alongside of me, sharing my insights, professional readings, and research. My vision was to think about the many possibilities that exist when you consider a school as an ecosystem rather than simply as an institution, but I was not sure exactly how to make this happen. Infusing the arts into our daily teaching, reconnecting to nature, redesigning our classroom/school space, and teaching the curriculum from a stance of wonder, rather than from just a delivery model, seemed to be the main catalysts. It created this incredible energy within our school on so many different levels and fostered a sense of teacher and staff efficacy beyond anything I could have hoped for as a principal.

I am so proud when other educators ask during their school visits if any of our students have complex needs because the students appear so calm, engaged, and regulated. Social justice and inclusivity are very important to me and I believe schools should be exemplary models for communities and society as a whole. Schools should be spaces that emulate that we all have something important to contribute to the world and that the quality of our lives is also enriched when we support and help others. Deep learning is all encompassing and I believe it has the capacity to extend far beyond academic success to positively impact society as a whole. Everyone benefits when there is a diverse community of learners.

Another important question was raised in the feedback we receive from our feeder school and their perceptions of our more holistic teaching approach. Many wonder if the middle school has adopted or been inspired by some of the changes we have made at our school. Our feeder school was very intrigued with our flexible seating and, as a result, replaced desks with classroom tables for their classrooms. They also began to incorporate more math games using cards and dice which were successfully assisting students in developing their mental math skills and concepts.

I think it is very important to have a respectful, supportive, and open relationship between feeder schools. Although we are always striving to increase resiliency and responsibility in our young students, there are many challenges inherent in this transition. Moving to another school with a different culture and learning environment can be very intimidating for some students, but it is also a perfect opportunity for growth and mitigating manageable struggles. It is healthy for students to have these challenges or setbacks during a transition, although of course many students also embrace the change, and I think it is important to work as a unified team of educators to communicate this message to students and parents. Having teachers and students visit classrooms in each school closer to the transition year is also very beneficial. Additional meetings and professional learning networks to discuss the successes and challenges students are experiencing in their learning and social-emotional growth helps to alleviate some of the setbacks the students might experience in their new school.

What funding strategies have worked for you?

Initially, I researched and applied for any available grants, including our own divisional innovative grants that were available at the time, and particularly, sustainability grants due to our increased focus on reconnecting students and staff to nature. We also used some of our

school fundraising when it was appropriate. With our sustainable efforts, we were saving money in some areas by reducing our paper consumption and upcycling cardboard and found materials. These savings were re-allocated towards classroom furniture, student materials, and resources. This journey is not at all cost prohibitive in my view and is, in fact, more sustainable as everything that is purchased is purposeful and well utilized by the students and staff.

How has your experience at Sigurbjorg Stefansson impacted you personally and professionally?

My experience at SSES has profoundly impacted me both personally and professionally, and I believe there are many other staff members that would echo this sentiment. Inspired by a multitude of scholars from Harvard University, and author-researchers such as Sir Ken Robinson, Csikszentimihalyi, Rinaldi, Fraser, and Fullan, it is evident that social-emotional well-being is imperative to student success. Milton and Dunleavy's research on the importance of academic, intellectual, and social-emotional engagement also resonated with me and affirmed the successes our students were experiencing when these three domains coalesced. As a leader, facilitating and creating the conditions for employing a social justice and diversity lens to ensure that a thriving and inclusive teaching and learning environment was fostered was by far the most challenging but also the most rewarding to me. The powerful insights and testimonials shared with me from students, staff, parents, and other educators because of their involvement with our school will be gifts I will always cherish. I am beyond grateful to have been a part of this journey and I very much look forward to the years ahead as we navigate through some of the political changes and educational reviews on the horizon.

Julie Van Caeyzeele
Elementary Teacher, Manitoba

What inspired you to explore a Living Schools approach in your classroom? What has that been like for you and your students?

When I was first introduced to the Living Schools approach, I felt a rush of relief that a framework finally existed that understood the needs of a classroom and prioritized the most important learning for students today. The transition of moving towards a Living Schools approach in my classroom has been easy and fulfilling. I finally feel like I am meeting the needs of my students in so many more ways than just academics and social-emotional learning, but also supporting them in developing themselves as learners and contributing members of a community. My students feel supported to learn through avenues that make the most sense to them and often do not realize they are learning as we incorporate the facets of Living Schools, such as outdoor learning, play-based learning, freedom in choice, and more.

What advice do you have for other classroom teachers who may want to start their own Living School journey?

I encourage them to focus on what excites them the most about Living Schools and then build on it. We need to utilize our own strengths as teachers just as we encourage our students to. I had to get past what felt like demands for how my classroom should run and trust in the research and my gut that Living Schools encompasses it all. Learning looks much different than we were all taught it should look in our university experiences. Changing my priorities to better meet the needs of learners as outlined in the Living Schools approach has increased the sense of happiness and accomplishment in my classroom for both my students and myself.

How important was funding or other resources for you in implementing Living Schools approaches in your classroom?

Not important at all. I did not require any funding to make Living Schools possible. The only funding that has helped support my classroom has been to purchase an indoor tower garden to be able to enjoy healthy veggies all year and work on our green thumbs.

How has establishing a Living Classroom impacted you personally and professionally?

Living Schools can feel overwhelming in the beginning and it is ideally geared towards a whole-school approach. I found that not to be realistic for my situation in the beginning, but instead a goal to work towards. I instead focused on a Living Classrooms approach that helped me to better navigate where I wanted my classroom priorities to be and how I would get there.
I am a stronger teacher thanks to the integration of a Living Classroom and personally feel more accomplished that I am meeting the needs of my students. I feel empowered to create unique learning opportunities and am able to support my students in creating their own learning paths.

Jennifer DeVera
Dawson College, Living Daycare Program, Montreal

What inspires or inspired you to develop a Living Daycare?

When I was pregnant, I did not want to be apart from my son in his early years. I could not see myself sending him to daycare while I worked, so I decided the only way I could be with him was to open my own educational preschool. My second son was born two years later, and my goal was to maintain my business until my boys graduated to kindergarten. I hired amazing educators who actually cared about their job and the children. The majority of daycares have a very high turnover of educators, but my preschool was unique in that we had educators who stayed with my school for many years; we greeted parents and the children at the door, we had monthly pancake breakfasts, potlucks, and field trips, which we invited the parents to on all

occasions. This built a very close-knit community, and instead of closing the preschool when my boys both graduated, I stayed open for 16 years. In my preschool we had local parks and a nice open field behind us that we had full access to. We went outdoors all the time. Being a preschool educator for so many years made me realize that children in the age group of 18 months to five years old are such sponges; they absorb and maintain everything we taught them. Our goal was to educate them so they would carry out the skills and knowledge throughout their lives. After I closed my preschool, I started working for Dawson College and missed working with that young age group. I approached my manager and asked if I could start a Living Daycare program with the Dawson daycare, and he said, "Yes!" We are now in our second year running a weekly sustainability program. I believe it is important to teach children the importance of living a sustainable lifestyle.

What advice do you have for other educators who might be interested in creating a Living Daycare?

You have to be creative and think of art activities that require materials that are either re-used, or re-purposed, and simply upcycle them into wonderful projects! I was lucky in that I had a lot of leftover materials from my preschool. I am three months into my program this year and have not spent any money yet! It is also important to think of projects that children can re-create at home or bring home so they continue to see and learn. We planted beans from seed and we taught the children how to make self-watering containers using recycled water bottles. We also ensure we plan activities that stimulate all five senses; that way the children will remember more because they physically experience the activity instead of watching a video or simply reading a book. We use books as an introduction to a topic, then we do the actual project. It is also important to allow the children to make their own choices and for educators to realize that it is the *child's* art, and if they want to colour a shamrock blue instead of green, that is okay. Too many daycares I have visited have the class art on the walls and they all look like cookie cutter crafts—all the same. If you do not let a child explore and be creative, then they will grow up feeling they have to always colour inside the lines. In Nature, everything is different; plants and flowers don't grow in straight lines, and we have to allow the children to mimic Nature and grow wild, but with care and guidance. When I had my preschool, we would often go for walks, even when it was raining, and the children would say, "But Ms. Jenn it's raining," and I would say, "That's okay, we need water to grow, just like the flowers!"

What kind of funding would people need to establish a Living Daycare?

I use leftover materials from my preschool, but if you do not have a big budget, there is Pinterest and other websites that you can look up by materials. For example, art activities using toilet paper rolls, or tissue boxes, et cetera. You have to plan your monthly themes in advance, and if need be, ask the parents to bring in materials so you can re-purpose items and use them for your art activities or games. When the weather permits, go outdoors; use Nature as your tool; play matching games or scavenger hunts using pinecones, pebbles, and leaves. Do leaf

rubbings or tree-bark rubbings using paper and crayons; there is so much you can do on a tight budget.

What impact does it have on you personally and professionally to create and offer a Living Daycare program?

It brings me joy seeing the children's faces every week. At times I bump into the parents in the Dawson hallways and they always tell me how their child came home talking about "Ms. Jenn." It is so important for the children to learn the importance of living a sustainable lifestyle. It makes me happy knowing that I have made an impact on the children's lives. It is such a nice feeling when I see the children and they tell me about an insect they saw, or a rainbow they saw in the sky, or a worm they saw on a rainy day. The fact that the children extend their learnings outside of the time they spend with me is a reminder that what I taught them made an impact on them. I also work within the gardens with the Dawson Sustainability-Team student volunteers who are 18+ years old; they get to touch the soil, plant seeds, pick berries, and walk outdoors. When I ask the students why they chose to volunteer in the Dawson gardens they say, "it reminds me of my grandpa" or "my mother had a garden." The fact that I bring them back to their childhood memories by gardening with them is such an amazing feeling. When the Dawson daycare children grow up, I hope when someone asks them why Nature is such an interest to them, they say, "it reminds me of when I was in daycare and learnt from Ms. Jenn."

Brent Kay
Former Superintendent, Orange Southwest Supervisory Union, Vermont

What inspired you in your work to transform education in your school district?

I have always had a love of learning. If you imagine a situation where you observe children or young people engaged in doing something they are interested in, there's no learning outcomes involved, not a lot of direct instruction. Kids persevere, they try and try again, because they are fully engaged in what they love to do. It really comes down to that for me. Students have to be given voice and agency and a say in what and how they learn.

I am a big believer in public education; all children should have the opportunity to learn in engaging ways that are connected with their own interests and priorities. Learning has to be experiential and connected to the real-world—and by that, I mean the community—to what they see outside the classroom walls. The community must be a part of the journey to develop kids into active, engaged, and engaging citizens.

As a superintendent I made sure I taught some classes. I think it is important for educators and administrators to stay deeply connected to the life of the classroom. So I guess I was inspired to change the education experience for the students and teachers in my school district because I firmly believe kids are natural learners when they can pursue their interests for reasons connected to their everyday lives.

What advice would you give to other school leaders and superintendents who want to change what happens in education to align with a Living Schools vision?

One big piece of advice I would give is to expect opposition, challenge, and push-back. Change is difficult for people. However, with persistence and patience, and building the right team, things will change. But you must have the right people with you who share your vision. When we hired teachers for the school district, we decided on 3 qualities we were looking for—and they were non-negotiable: 1) they had to love kids; 2) they had to show a commitment to learning—their own learning—and a willingness to use and integrate technology; and 3) they had to demonstrate a meaningful connection to community-based learning. Taking learning out into the community and inviting community members into the classroom is powerful on so many levels, and it shifts the school into the life of the community.

Over time, we built a critical mass of educator and community support for the vision. The community understood the benefits of what we were trying to do and community involvement continued to grow. The schools became hubs of entrepreneurial activity, and young people found meaningful ways to connect and make a real difference by contributing to the community. Businesses and community leaders were anxious to find ways to connect with the schools. This led to real and substantial investment in learning labs, state-of-the-art learning spaces, and co-op programs in communities previously known for declining population and youth out-migration. All of this was the result of connecting the school to the life of the community.

Resources and the lack of funding to support transformational initiatives like a shift to a Living Schools model are often cited as to why change cannot occur. How did funding the transformation work for you?

Financing change is very important, but budgets should not drive change. The vision drives the change. The budgeting supports the vision. What is the narrative that you want to tell about the schools? How can the budget process assist you in realizing that transformation?

Early in my tenure as superintendent, I asked the principals and the boards for one percent of their budget to be allocated toward change initiatives. One percent—people felt that was reasonable; everyone could come up with one percent. The money went directly into classroom investments—not bureaucracy. We found efficiencies wherever we could, duplication of services, redundancies, re-negotiating custodial contracts, and even when people saw what may be perceived as "cuts," they soon came on board when they realized all of the savings went directly into classroom-based initiatives and projects.

We also were able to raise teacher's salaries by $13,000 a year; in the U.S., school districts pay teachers, and we attracted highly qualified people and could "choose" the teachers who best fit with our vision. There's a lot to say about budgeting and resourcing transformational change, but it all comes down to how to best realize your vision.

I remember the traditional practice for principals was to micro-allocate the school teaching resource budget to each teacher on staff. Let's say each teacher received $250.00 for books or consumables—whatever. It wasn't enough money to really do very much—but it felt

fair. I posed the question, "How about pooling the allocations?" Decide as a school on a priority connected to the transformational vision—something substantial—and plan something big and meaningful, and allocate the funds toward that. In the next planning phase—three to five years—identify other priorities and pool resources to realize meaningful change. There was some resistance at first, but when teachers, parents, students, and principals saw what was possible with the money that previously made very little real difference to the school and the classroom—they bought into the plan.

So, let the vision and the narrative you want to tell about your school and your district drive the budget decisions—not the other way around.

Concluding Thoughts

Living Schools are co-emerging independently and organically around the world. The Canadian Living School concept is not conceived as proprietary but open source, with resources available to teachers, parents, and administrators free of charge. Planning is underway to create a community of Living Schools with opportunities for sharing, community building, and research through the website https://www.livingschools.world/. Schools can avail themselves of the materials and move toward realizing the attributes and practices reflective of a Living School in ways that are best adapted and relevant to each school's unique contexts. The process is not designed to be competitive, hierarchical, or formally structured through designations or rankings of any kind. We are looking forward to learning from the experience of the Living School in Australia that John Stewart described in Chapter 4 (this Volume) and has just opened in January 2020 (http://livingschool.com.au/).

As we interact with educators, we are continuing to develop resources that support the further development of Living Schools. The Living Schools Discussion Chart is a fillable PDF document that can be used by individual teachers and school teams to consider what you are already doing that aligns with the Living Schools Attributes and Practices framework, what next steps you would like to make, and how you are going to accomplish your new goals. The Living Schools Classroom Planner assists educators to explore how they may incorporate the attributes and practices in their classroom. If you choose to complete either of these documents, you will likely find that there are many things already happening at your school that reflect Living Schools. Teachers have told us that it is a pleasant surprise to discover that becoming a Living Schools doesn't have to be an "add on" to good teaching practice and a healthy school culture. Rather, it can affirm many initiatives that already exist, reinforce their value, and offer a path for continued growth.

Teachers can also share a brief Introduction to Living Schools with colleagues and administrators by accessing this two-page summary.

Living Schools are at the forefront of educational transformation. The contributors to this book have conveyed inspiring stories of what is possible when schools and educators are leading change that fosters *well-being for all*. In an era of pressing environmental and human well-being challenges, formal education cannot persist with outdated models and practices.

Each of us has a role to play in dislodging ourselves and our institutions from approaches to teaching that represent an old narrative about the purpose of education. This may require us to reflect on our teaching practice, our views about taking risks as an educator, acknowledging our strengths, learning from colleagues, and being open to change.

Each step that teachers, administrators, and school communities take towards Living Schools generates new relationships and builds expertise to share. Dawson College's Living Campus influenced our desire to develop the Living Schools framework. The first Living Schools Symposium that was hosted by Dawson College led to a community centre expressing their desire to be a Living Community Centre. Dawson has encouraged the launch of a Living Daycare program. The second Living Schools Symposium in 2019 led to the development of a Living Campus Attributes and Practices framework. At the time of writing, the 2020 Living Schools Symposium is going to be hosted at Cookshire Elementary School in Quebec (mentioned in Chapter 3, this Volume) and five other schools from Cookshire's school district have been invited. We anticipate that this will forge new collaborations and networks. These kinds of initiatives continue to influence educators within Canada and beyond. We are tremendously excited to witness the receptivity that educators express about the value of Living Schools and the benefits they are experiencing. Our hope with this book is that you will use it to add to the Living Schools narrative and enrich yourself, personally and professionally.

APPENDICES

LIVING SCHOOLS ATTRIBUTES & PRACTICES

Values & Vision School community members are committed to:	Leadership Organizational structures are characterized by:	Teaching & Learning Pedagogical practices are influenced by:	Nature & Place-Based Orientation Schools reflect a commitment to:	Health & Well-Being School community demonstrates practices designed to:
Engaging with the world	Ensuring teachers and students have voice and agency	Collaborative processes	Using natural, social, built environments, including the school envelope to foster learning	Develop emotional, physical and spiritual well-being of students, staff, and teachers
Developing a cultural awareness of other's world views and identities	Developing strong collaborative relationships with staff, parents, guardians, and community	Holistic approaches to teaching and learning	Incorporating outdoor learning relative to location of school	Support the principles of health promoting schools
Demonstrating and modeling care for plants, other animals, and the rest of the natural world	Creating opportunities for professional development for transformative learning	A commitment to inquiry-based strategies to affect real-world change	Developing ecological literacy of students and teachers	Explore the links between human health and the natural world
Developing compassion for oneself, other people and all living things as well as skills to address positive change	Cultivating an ethos of equity, inclusion and diversity	A spirit of inclusion, student centred and differentiated learning	Incorporating furniture, light, classroom resources sustainably and to promote well-being	Explore the relationships between sustainability, happiness, and well-being for all
Promoting the health and well-being of students, staff, the wider community, and the natural environment	Explicit support for sustainability education and well-being	The development of creativity and creating a climate for risk taking and student agency	Developing strong ties to community and commitment to active citizenry	Support positive communication in the classroom, at school and with the wider community
A solution-focused growth mindset when facing challenges and opportunities	Encouraging risk taking to explore new ways of living, learning, and working in a safe environment	Modeling healthy and sustainable lifestyles		
Creating trusting and respectful relationships in the school community		Authentic assessment of and for learning practices		
Respecting indigenous world views and traditional ways of knowing				

LIVING SCHOOLS

Howard, P., & O'Brien, C. (2018)

Appendix 1: Living Schools Attributes & Practices Chart

Appendix 2: Living Schools Discussion Chart

The Living Schools Discussion Chart (fillable PDF) is available at http://livingschools.world.

Appendix 3: Attributes and Practices of a Living School in a P/1 Classroom

adapted by Elisha Boutilier from
"The Ethos, Attributes and Practice of a Living School"
created by Patrick Howard and Catherine O'Brien

These charts can be used with elementary students to explore their view of Living Schools.

Health and Well-Being			
	This is one of our strengths! (give examples)	**This is an area we want to grow**	**Possible next steps (How we will grow)**
We are mindful.			
We take care of our minds and bodies.			
We know that others/the world can affect our well-being.			
Everything we say and do can affect others.			
We use kind words and explain our thinking clearly (in all areas of life).			
Notes:			

How We Learn			
	This is one of our strengths! (give examples)	**This is an area we want to grow**	**Possible next steps (How we will grow)**
We work together.			
We are all teachers and learners. We participate in class and help each other.			
We can give suggestions about what we want to			

learn (world problems we want to solve)			
We learn at a level that is "just right".			
We are encouraged to take risks, ask questions and give input.			
We learn from nature.			
We make personal goals. We self-reflect and are active participants in our personal growth.			
We enjoy what we learn/do.			
Notes:			

Protecting Our Environment			
	This is one of our strengths! (give examples)	**This is an area we want to grow**	**Possible next steps (How we will grow)**
We keep our school environment clean.			
We recycle.			
We reduce the amount we use.			
We reuse materials.			
We understand how we affect our environment and how our environment affects us.			
We promote environmental friendliness to others.			
We are environmental leaders in our school, homes and community.			
Notes:			

Being a Great Role Model, Leader and Citizen			
	This is one of our strengths! (give examples)	**This is an area we want to grow**	**Possible next steps (How we will grow)**
We respect our similarities and differences.			
We have a voice and speak our mind. We use our voice to stand up for what's right.			
We think about and work through real-life problems.			
We demonstrate respect to others.			
We ask and are given help when needed.			
We are brave and take risks. We learn best from our mistakes.			
We recognize others for their accomplishments and contributions (e.g. recognition circle)			
Notes:			

Expanding Our Learning Outside the Classroom			
	This is one of our strengths! (give examples)	**This is an area we want to grow**	**Possible next steps (How we will grow)**
We learn in a variety of areas (e.g. various school locations, inside/outside).			
We use an "outdoor classroom" for a variety of purposes.			
We understand and explore the environment around us (e.g. outside school & within our community).			

We are encouraged to find the best learning environment that works for us (e.g. area in class, flexible seating, lighting).			
We identify and explore solutions to problems within our school and community.			
Notes:			

Thinking about Our Big World. Applying What We Know from Inside Our Classroom Out!			
	This is one of our strengths! (give examples)	**This is an area we want to grow**	**Possible next steps (How we will grow)**
Cultures: We learn about and from other cultures. We think about different cultural perspectives.			
Environment: We help our environment.			
Relationships: We develop and show empathy and compassion for others.			
Well-being: We take care of ourselves, each other and nature.			
We are problem solvers!			
Application: We think about ways we can help our world. *Independent or small group projects (brainstorming problems, thinking of solutions & engaging with our world). *Start within the classroom, move to school wide, community and beyond.			
Notes:			

Appendix 4: Personal Well-Being Self-Assessment

created by Catherine O'Brien (2015)

PERSONAL WELL-BEING SELF-ASSESSMENT

On the likert scale below, the questions correspond to the PERMA model for well-being (Seligman, 2011). Circle the number that fits for you personally. Then you will complete the scale for yourself as a professional.

On a scale of 1 to 5 how satisfied are you with each of these areas below?

1) Positive Emotion. I feel that I experience many positive emotions on a daily basis.

1	2	3	4	5
Not Satisfied	Somewhat Satisfied	Neutral	Moderately Satisfied	Very Satisfied

2) Engagement. I feel engaged with my community/friends/activities.

1	2	3	4	5
Not Satisfied	Somewhat Satisfied	Neutral	Moderately Satisfied	Very Satisfied

3) Meaning. I feel that my life has a sense of purpose and meaning.

1	2	3	4	5
Not Satisfied	Somewhat Satisfied	Neutral	Moderately Satisfied	Very Satisfied

4) Positive relationships. I feel that my personal relationships are healthy.

1	2	3	4	5
Not Satisfied	Somewhat Satisfied	Neutral	Moderately Satisfied	Very Satisfied

5) Accomplishment. I enjoy both the small and large accomplishments in my life.

1	2	3	4	5
Not Satisfied	Somewhat Satisfied	Neutral	Moderately Satisfied	Very Satisfied

Sustainable Happiness

Appendix 5: Professional Well-Being Self-Assessment

created by Catherine O'Brien (2015)

PROFESSIONAL WELL-BEING SELF-ASSESSMENT

1) Positive Emotion. I experience many positive emotions on a daily basis at work.

1	2	3	4	5
Not Satisfied	Somewhat Satisfied	Neutral	Moderately Satisfied	Very Satisfied

2) Engagement. I feel engaged with my colleagues.

1	2	3	4	5
Not Satisfied	Somewhat Satisfied	Neutral	Moderately Satisfied	Very Satisfied

3) Meaning. I feel a sense of purpose and meaning through my work.

1	2	3	4	5
Not Satisfied	Somewhat Satisfied	Neutral	Moderately Satisfied	Very Satisfied

4) Positive relationships. I feel that my professional relationships are healthy.

1	2	3	4	5
Not Satisfied	Somewhat Satisfied	Neutral	Moderately Satisfied	Very Satisfied

5) Accomplishment. I enjoy both the small and large accomplishments of my work.

1	2	3	4	5
Not Satisfied	Somewhat Satisfied	Neutral	Moderately Satisfied	Very Satisfied

Looking at your self-assessments, are there any areas of well-being in your personal or professional life that require more attention? What steps might you take to enhance your well-being?

Excerpt from Education for Sustainable Happiness and Well-Being (O'Brien, 2016)

Appendix 6: Sustainable Happiness and Well-Being: Daily Choices and Practices

Sustainable Happiness and Well-Being: Daily Choices and Practices
(Created by Catherine O'Brien, 2017)

Identify daily choices that you are making or could make to foster sustainable happiness.

Attribute	Individual Well-Being	Well-Being of Others	Ecological Well-Being	Classroom/ School
Humanity Compassion, Love, Empathy, Kindness, Generosity, Forgiving				
Passion Creative, Innovative, Playful, Curious, Inspired, Awe, Wonder				
Humility Reflective, Flexible, Grateful, Open-minded, Self-Aware, Respectful, Interconnected				
Integrity Authentic, Honest, Transparent, Congruent, Principled, Ecological Integrity				
Courage Brave, Tenacious, Adventurous, Resilient				
Focus Patient, Calm, Tranquil, Mindful, Self-Regulated, Stillness, Appreciation, Non-Action				

Growth Mindset Optimistic, Future-Minded, Hopeful, Resourceful, Adaptable				
Just Fair-minded, Equitable, Ecologically Responsible, Accountable, Socially Responsible				

Appendix 7: Sustainable Happiness and Well-Being: Daily Choices and Practices (Food)

Sustainable Happiness and Well-Being: Daily Choices and Practices (Food)
(Created by Catherine O'Brien, 2017)

This chart is a sample of how the Sustainable Happiness and Sustainable Well-Being Framework can be applied to explore daily choices and practices related to food.

Attribute	Individual Well-Being	Well-Being of Others	Ecological Well-Being
Humanity Compassion, Love, Empathy, Kindness, Generosity, Forgiving	Healthy choices – mindful cooking and eating, tolerant of digressions (forgiving)	- local food, cooking for others, Community Supported Agriculture and Farmers' Market	- organic, vegetarian, consider vegan days
Passion Creative, Innovative, Playful, Curious, Inspired, Awe, Wonder	- try new foods and recipes, enjoy food preparation	Organize potluck dinners to exchange recipes and enjoy communal eating	- explore plants that I can grow for food all year
Humility Reflective, Flexible, Grateful, Open-minded, Self-Aware, Respectful, Interconnected	- notice inconsistencies in current practices – explore food miles of some of the 'exotic' foods I enjoy	- consciously notice and express gratitude for my food and to the people who are growing it	- offer respect to the plants that nourish me
Integrity Authentic, Honest, Transparent, Congruent, Principled, Ecological Integrity	- consistently assess my progress towards "Deep Table"	- modeling sustainable food practices and sharing what I have learned	- actively reduce packaging and food miles
Courage Brave, Tenacious, Adventurous, Resilient	- take the risk of preparing new kinds of food, learn from mistakes	- invite friends to join me on my Deep Table journey	- consistently strive to reduce my ecological food footprint
Focus Patient, Calm, Tranquil, Mindful, Self-Regulated, Stillness, Appreciation, Non-Action	- mindful eating, appreciate source of food, refrain from over indulgence – slow food	- explore ways to combine communal eating with an enjoyable atmosphere - music	- bring mindfulness to practice of becoming an 'urban farmer'

Growth Mindset Optimistic, Future-Minded, Hopeful, Resourceful, Adaptable	- a perfect fit for growing and eating local food! – continuous learning about Deep Table	- mentor others or encourage others to embark on their own Deep Table journey	Sharing stories of success to encourage others to enjoy a Deep Table journey and collectively reduce footprint
Just Fair-minded, Equitable, Ecologically Responsible, Accountable, Socially Responsible	- fair trade products, local, continue to monitor my progress	Supporting local growers, fair trade producers, modeling Deep Table practices	Share experiences with Slow Food movement