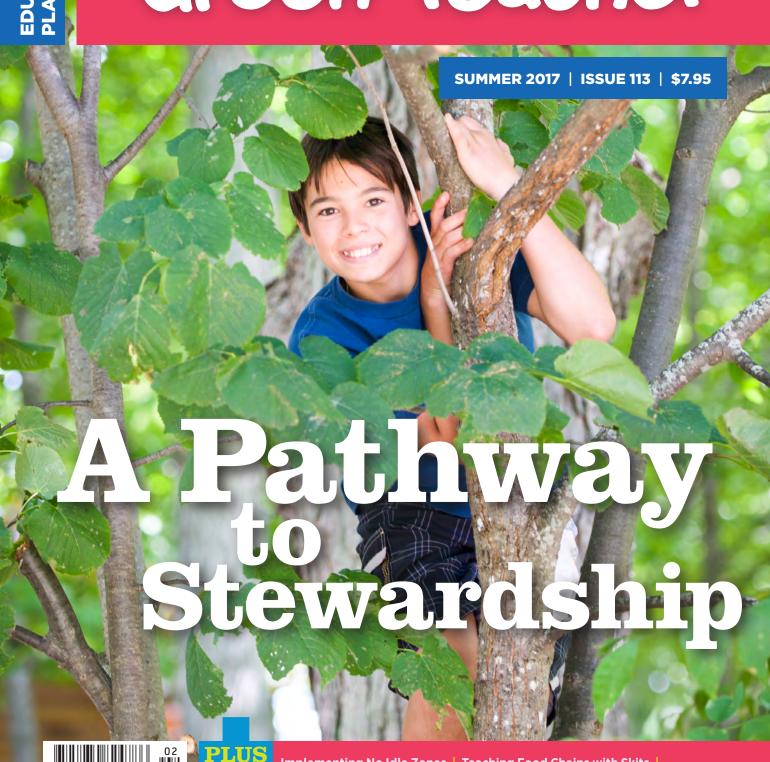
Green Teacher





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EDITORIAL

Celebrating our Leaders

F YOU HAVE ATTENDED an inspiring workshop or conference, you have likely rubbed shoulders with, and possibly thanked the dedicated group of volunteers who worked behind the scenes to ensure its' success. But our appreciation should probably be extended to another group of volunteers – those who established the host organizations many years ago. This spring I spent much time thinking about this when I attended the 50th annual conference of the Environmental Education Council of Ohio, and a few weeks later, the 25th annual conference of the Canadian Network for Environmental Education and Communication (EECOM).

Both of these milestone events were celebratory affairs. Amidst the packed agendas, the conference chairs took time to salute those who



helped to establish their organizations and those that managed to sustain them through subsequent years. The first group were the pioneers who had a vision of how such an organization could assist educators and build public support for environmental education more generally. They were persuasive individuals, who motivated and inspired others. And they put in countless hours to accomplish their vision. Not everyone can lead, nor can most dedicate the hours that those leaders invested to draw diverse voices into a

cohesive organization. Needless to say, those early leaders laid the organizational foundation that subsequently enabled tens of thousands of educators to better incorporate sustainability into their programs, and how best to introduce young people to the natural world around them.

While not a founder, I was EECOM's vice-chair for 15 of its first 25 years. As such, I am very aware of how many challenges there are to sustaining volunteer-run organizations. You have to raise money, establish newsletters and websites, determine membership benefits, organize conferences, and endlessly make public officials aware of the value of environmental education. In addition to these ongoing challenges, most organizations take on special projects each year. With so many possible choices, it is often tough to develop a consensus as to the best course of action.

What is the take-away from this? The next time we attend a work-shop or a conference, let's take a few moments to thank the organizers. They deserve all the praise and gratitude that we can muster. Then let us take another moment to thank any of those in attendance who helped to establish and maintain the host organization for so many years.

What Happened to the Spring issue of Green Teacher?

Good question! Sad to say, but it seems that every two years or so, we get so behind that we have to skip an issue. Over the past several months, our progress on what was to be our Spring issue was slowed by an office move, staff changes, our work on a soon-to-be-published book on climate change and the launch of Green Teacher's video channel. Rest assured: we will be extending everyone's subscriptions by one issue.

—Tim Grant



The Pathway to Stewardship

How to develop a community-wide strategy to nurture environmental stewardship in children and teens

By Jacob Rodenburg

BEING AN ENVIRONMENTAL EDUCATOR in today's world feels like you are asked to stop a rushing river armed only with a teaspoon. There are so many issues coming at you—from climate change to habitat destruction, from oceans of plastic to endangered species and from the loss of biodiversity to melting glaciers and the list goes on... Teaching children about these formidable challenges seems daunting, overwhelming and at times, well – hopeless.¹ And despite our best efforts, things just seem to be getting worse.

Perhaps like a reversed telescope, environmental education is being looked at in the wrong way. Instead of dealing with reactions to problems and to trying to solve environmental issues as they arise, it may be worthwhile to think about the type of citizen we want for our earth. Or, as Simeon Ogonda, a youth development leader from Kenya, asks: "Many of us often wonder what kind of planet we're leaving behind for our children. But few ask the opposite: what kind of children are we leaving behind for our planet?" ² Raising environmentally engaged citizens doesn't happen by itself. As the saying goes, "it takes a village." All of us collectively are responsible for fostering the stewards of tomorrow.

Now more than ever, there is a sense of urgency. Studies are showing that there are rising levels of anxiety, attention deficit hyperactivity disorder and anti-social behaviour in children.³ A sedentary, indoor lifestyle where the average child spends more than seven hours per day in front of a glowing screen and less than 20 minutes per day in active outdoor play, is leading to unprecedented rates of childhood obesity.⁴ Today's children may be the first in generations not to live as long as their parents.

At the same time there is mounting evidence to suggest that exposure to nature while growing up reduces stress, improves physical and mental health, stimulates creativity, builds self-esteem and encourages co-operation, collaboration and self- regulation.⁵ In his book *Last Child in the Woods*, Richard Louv claims that children need contact with nature (or as he calls it – Vitamin "N") as an essential part of a healthy childhood.⁶ The work of Joy Palmer, an environmental educational researcher, found that regular exposure to nature is the single most important factor in fostering care and concern for the environment.⁷ If children are spending more and more time indoors and direct contact with natural environments is important in fostering stewardship, one wonders where tomorrow's stewards will come from?

Charting the Path

This article is an attempt to offer up an environmental framework for education, centered on stewardship, and anchored in Indigenous ways of knowing. For millennia, Indigenous peoples harvested, hunted and lived in a close relationship with the land. The Anishinaabe word "Nwiikaanigana" (roughly meaning *all my relations*) embodies the idea that we are part of a much larger family that includes the natural world. There are many traditional teachings that may help us to renew and strengthen our relationship with the environment.⁸

At the same time, teaching environmental education should not just be the domain of specialists – outdoor centres and environmental educators. If we truly want to foster the environmental citizens of tomorrow, we need to involve our entire community: That means parents, grandparents, educators, schools, organizations, community leaders, health professionals, municipal officials and businesses. A theory of change around community environmental education is being developed in Peterborough, Ontario, Canada. It is called "The Pathway to Stewardship".9

Stewardship can be defined as a sense of connection to, caring about and responsibility for each other and the natural world around us. It involves personal action to protect and enhance the health and well-being of both natural and human communities by providing children with the right tools and experiences at every age to know, love, respect and protect the very life systems that sustain and nurture us all. Being a steward should not imply entitlement or power or dominion over the earth. Rather, fostering stewardship means teaching children how to become engaged citizens of and for the earth.

The Pathway to Stewardship emerged out of a conversation between a group of community stakeholders in Peterborough, Ontario including: educators, professors, Indigenous leaders, public health officials and conservationists. The stakeholders wanted to find ways in which multiple sectors could coordinate their efforts in order to promote stewardship throughout all ages and stages of a child's development. The group began by conducting a broad range of research into environmental education, Indigenous teachings, child development and the factors promoting mental and physical health in children. Using the model of environmental sensitivity research, they also interviewed more than seventy five community leaders who expressed an interest in environmental issues. 10 The group wanted to explore what formative childhood experiences these leaders had while growing up that helped shape their interest in the environment. By incorporating both the themes that emerged from these interviews along with the results of their meta-research, the group felt these findings could provide a solid foundation for a workable stewardship framework for their community.

A number of important themes began to emerge both from the research and from the in-depth interviews conducted. They can be summarized as follows:

Tending and caring

In order to value all life – children need to practice caring. Like a muscle, the concept of caring is one that should be exercised repeatedly – by gardening, by looking after a pet, by raising monarchs. Caring requires empathy and compassion, a deliberate attempt to imagine what it must

be like from another being's point of view. In essence, caring is about developing relationships. From caring flows the idea of reciprocity – the mindful act of giving back. And from reciprocity emerges respect. And finally, a sense of respect engenders a sense of responsibility – of wanting to take action because you care. These four "R's" are central in Anishinaabe teachings. Ultivating love and humility inspires sensitivity toward others and a desire to develop healthy relationships and a sense of balance with the world around us.

Awe and wonder: The engine of learning is curiosity. Curiosity in turn, is fueled by healthy sense of awe and wonder. As adults we need to role model a positive and healthy connection to our environment. We forget as adults how powerful language can be. If we want to cultivate a sense of wonder, we need to use the language of wonder. Words can inspire or discourage. Saying "put that down, don't touch that, it is dirty," sends a coded message to children that the outdoors is dangerous. On the other hand, saying something like "wow, look what you've found, isn't it amazing" celebrates the potential of a child to be part of an ever unfolding journey of discovery.

Sense of place: An important part of developing a sense of comfort and belonging is spending enough time outdoors in the same place to become deeply familiar and connected with it. For those of us who have developed a particular attachment to a place when growing up, that sense of place becomes part of our identity. It is important to give children plenty of time to develop those deep attachments to place, whether that is a favourite park or a nearby green space. Overwhelmingly, the community leaders interviewed for the Pathway to Stewardship Initiative cited special natural places that they grew to know and love as a very important part of their childhood.

Interconnectedness: Children benefit from many opportunities to learn how their lives are connected to the lives of other people and other living things. We use the same air, the same water – the food we eat contains nutrients that have been shared by many others for millennia. This understanding reinforces the innate need to belong. Stewardship involves understanding that we are part of a community that extends far beyond our own close friends and relatives and also includes the living and non-living systems that support us all. At the same time, everything we do, every consequence of every action taken does not end in the present but our decisions and their implications echo into the near and distant future.

Mentors: Both in the research conducted and in discussions with community leaders, having access to a caring mentor is central in developing stewardship. In the early years, this is usually a close relative – a parent or grandparent who spends time with the child, exploring together and sharing the delights of discovery. As a child grows older, a mentor is often a teacher or a youth leader who becomes a trusted and admired role model.

Time to explore and discover: Another recurring recommendation, both in research and feedback from community leaders, points to the benefits of limiting screen time – television, computer and cell phones. Too much screen time limits physical activity, impairs social and creative development and serves to disconnect children from their natural surroundings. Community leaders recalled the "free range"



time they were provided as children by their caregivers, to explore nearby nature. Time to play, to romp and to discover fosters initiative, independence, stimulates creativity and promotes resiliency.

Engaged Action

Everyone, no matter their age or ability, can do something positive for the environment. Tending a garden, raising butterflies, caring for a natural area, reducing our energy consumption, are just some of the simple ways we empower our youth to make a positive impact in their own community. From an Indigenous perspective, acting with responsibility means responding with our abilities (response-ability). Remember the idea of agency. Kids can solve a problem provided they are given the right tools and strategies for their age. Every positive action leads to a sense of hope. And every bit of hope is empowering. As kids grow older they can begin to explore the idea of sustainable living: reducing their carbon footprint, investigating alternatives to fossil fuels, learning about product life cycles and issues of social justice.

How to Nurture Stewards

It is important to recognize that children at different ages respond to the environment in markedly different ways. Well-meaning educators may want to talk to small children about the imminent dangers of climate change and the effects of global warming, but small children simply don't have the cognitive faculties to process such large and multi-dimensional issues. Instead, like ever widening fields of self, children first discover their bodies, their senses and the environment immediately around them. As they become older, they recognize cause and effect, action and reaction. They discover empathy and compassion. Older still and they recognize that they are embedded in a community of people

and other living things. As teenagers they begin to be ready to understand larger, more complex issues facing their community and beyond. As mature teenagers they can take on issues of social and environmental justice.

The Pathway to Stewardship Committee used the results of their research and the themes gleaned from their interviews to develop a Stewardship Framework. The Pathway to Stewardship Framework articulates a number of stewardship principles and suggestes ways to implement these for children from early childhood to the teenage years. Nurturing stewards is a proactive undertaking. Building on a sense of wonder and awe, educators can start by modelling empathy and respect for all life. At each stage, children need opportunities to develop their spirit, heart, mind, and body. As children begin to learn about how the world functions, they understand the impacts that people can have and they explore solutions to challenges within their community. As youth develop leadership skills by participating in local action, they develop confidence, a sense of agency and belonging. Engaged stewards arise when we teach our children to know, love, understand and protect the very land they stand upon.

This is a call for educators, parents, community leaders and youth groups to coordinate their efforts in order to take collective responsibility for fostering stewardship. Every community has its own resources and opportunities for environmental education. Every community has its environmental challenges. And despite best intentions, environmental education initiatives are often delivered in an ad hoc and siloed manner by individual schools and/or by individual organizations. At times, efforts are duplicated. At other times key stewardship developmental opportunities are missed. One way to begin is by forming a stakeholders group and developing a collaborative approach among community

Here are a few small examples of the Pathway to Stewardship Framework:

For Young Children (Ages 3 to 6)		
Core Stewardship Principle	Stewardship Opportunity	
A time for deepening relationships and understanding.	Choose an outdoor place to explore and play in. Visit regularly. Provide loose parts for kids to manipulate (sticks, stones, tree slices).	
Reinforce and expand the developing sense of empathy.	Plant, tend and harvest something that can be eaten. Raise butterflies, care for an animal.	
Celebrate seasons.	Find simple ways to recognize and enjoy the change of each season.	
Cultivate sensory awareness of nearby nature	Identify natural sounds and smells. Explore micro-environments (peek under rocks/logs, create a mini trail)	
Encourage the idea of "neighborwood" – the idea that our community consists of other living things as well as humans and built structures	Get to know plants, birds, and five insects living in your area. Create a mural that depicts the characters of your "neighborwood."	
Offer a creative response to time spent outside	Develop art projects using natural materials. Create a story or a play about the characters in your "neighborwood"	
For Middle Childhood (Ages 7 to 12)		
Core Stewardship Principle	Stewardship Opportunity	
Develop more complex outdoor skills.	Try non-motorized outdoor activities, such as hiking, survival skills (shelter building, fire making, foraging wild edibles), orienteering, birding, and astronomy. Spend at least seven hours a week practicing these skills.	
Explore human impacts on the environment, develop leadership and decision making skills by planning and implementing a simple community based project.	Create a small naturalized area. Manage a school recycling or composting project. Plan a small stream/river clean-up project. Make a poster or video to educate your community about your project. Research and write about the history of the piece of land you occupy.	
Expand understanding of the relationships between living things and their habitats.	Explore biodiversity in a nearby natural area. Conduct a small scale bio-physical inventory, finding at least 10 species each of plants, animals and insects. Explain three ways this ecosystem helps the environment. Get involved in citizen science projects: monitor bird, butterfly and amphibian populations. Monitor ecosystem health by conducting basic water and soil tests.	
Expand understanding of sustainable lifestyles	Be an energy detective. Find out what kind of energy is used for heating, cooling, lights and appliances at home or school. What different renewable energy systems can you observe in your region? Design an energy efficient home that's healthy for both people and the planet. Think about using natural materials, passive solar design, rainwater harvesting, renewable energy, innovative ways to treat human waste.	



For Older Children (Ages 13 and older)		
Core Stewardship Principle	Stewardship Opportunity	
Expand skill and confidence in outdoor awareness, responsibility and survival	Research the meaning of sustainable harvest. How can the environment provide our needs without being damaged by human impact? Learn how to find your way in a natural area using maps, compass and/or GPS. Learn how to recognize at least two constellations in the night sky in each season. Learn how to tell the four directions using clues in the sky.	
Deepen understanding of how modern lifestyles affect the envi- ronment. Expand leadership and problem-solving skills by seeking solutions to ecological imbalances.	Calculate your ecological footprint. Research how your country's lifestyle consumes global resources, and how this compares with other countries. What does sustainability mean? Make a goal for yourself on reducing your ecological footprint. Try it for a month and assess how successful you've been. Get your family and school involved too.	
Expand abilities to understand and empathize with others while exploring and responding to local social and environmental issues.	Find an organization that is making a difference in your community. Volunteer. Teach someone younger than you an outdoor skill. Find someone to tell you how your area has changed over the years. Find a local hero who is working to protect the environment. Arrange for them to speak at your school. Volunteer in a natural area to help with trail maintenance, ecological restoration or control of invasive species. Help with a community tree-planting project. Participate in planning, planting, maintenance and monitoring. Do you think it was a successful project? Would you make any changes in future projects?	
Learn about social and environmental justice.	Find an issue of local concern that you feel strongly about. What problem needs to be solved? How does this issue align with global issues? Get involved. Learn simple action skills: how to make a presentation, how to write a convincing letter, how to organize an event. Learn how to listen and try to understand multiple points of view. Find a mentor who can help you learn and do more to solve this problem.	
Express your feelings about your local environment.	Write a story, a poem, create a visual art piece, or write a play that captures your feelings about the land you occupy. Write a letter to your ancestors. What would you say is worth protecting for your children and for their children?	

organizations including schools, early childhood programs, youth leaders, Indigenous groups, parent councils, municipalities and faith groups. Work together in order to develop a plan that ensures every child has access to key stewardship opportunities throughout their development. Then encourage other communities to do the same. In the end, it takes the heart and conviction of a village, to raise a steward.

Jacob Rodenburg is the Executive Director of Camp Kawartha, an outdoor and environmental learning centre near Peterborough, Ontario. As well, he is the co-author of The Big Book of Nature Activities (New Society Press). For more information about the Pathway to Stewardship initiative, visit: www.campkawartha.ca/pathway-to-stewardship

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Notes

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