A HISTORICAL NOTE FROM THE EDITORS

Rachel Carson: Celebrated Environmental Ecologist and Early Childhood Environmental Education Advocate

Yash Bhagwanji
Florida Atlantic University

Bora Simmons
University of Oregon

Not quite 60 years ago, and several years before the publication of Silent Spring (1962), Rachel Carson shared her thoughts about nurturing children’s connection with nature in the Woman’s Home Companion (July, 1956). Typically very private - and even protective - of her family experiences and history (Lear, 1997), Carson wrote the article presumably because of the very transcendent and powerful meaning, need, and value to engage children early on in the transformative experiences afforded only by the rhythms of biology and nature. She had described her experiences with her very young great nephew, of whom she later adopted following the passing of his mother.

Titled Help Your Child to Wonder in the Woman’s Home Companion, and posthumously published as The Sense of Wonder by Harper & Row Publishers in 1965, Carson, in her usual lyrical and marvelous prose, wrote about her “adventures” with her great nephew, Roger, starting at the age of 20 months and up past his fourth birthday.

We thought we would share with you some compelling quotations about her perceptions along with our own interpretations. Concurrently, we invite you to reflect on the quotations and draw your own conclusions prior to reading our interpretations. Better yet, it may be better to first read The Sense of Wonder in its entirety to determine for yourself the appropriateness of her reasonings.
Quotation

A child’s world is fresh and new and beautiful, full of wonder and excitement.

Our interpretation:

Children are exceptionally receptive to new learning experiences, driven by both biological and physical processes to absorb experiences in constructing an ever increasing base of knowledge and skills. Along with safe, nurturing environments and healthy nutrition, experiences are what feed their minds and compel their bodies to react. Delight, exploration, and wonder are children’s responses, intrinsically motivating in itself, at having discovered and learned something different or new. The early years are formative years, meaning that the early experiences will have a significant and long-lasting influence on their behaviors, characteristics, and skills in adulthood.

Quotation

It is our misfortune that for most of us that clear-eyed vision, that true instinct for what is beautiful and awe-inspiring, is dimmed and even lost before we reach adulthood.

Our interpretation:

The world of today is full of competing influences, such as television watching and preoccupations with screen-based game playing, which take opportunities and time away from developing a deep, intimate relationship with wonders of the natural world. Parents, too, are more than ever pressed for time. Pressures at work and chores at home provide little opportunity for the parents to help their children explore places of nature. A lack in frequent and enjoyable exposure to the world of nature is likely to lead to a lack of value for natural environments.
Quotation

If a child is to keep his inborn sense of wonder... he needs the companionship of at least one adult who can share it, rediscovering with him the joy, excitement and mystery of the world we live in.

Our interpretation:

All it takes is one caring or committed adult, someone who the child can come to trust and learn from, in helping the child develop an attachment to natural environments. This relationship is more about role modeling the enjoyment and marvel of the natural world. It is also a flexible and interactive relationship, building upon the interests shown by the child as well as language experiences and teaching, that encourages the child to explore, discover, and understand how nature works.

Quotation

Caregivers “often have a sense of inadequacy when confronted on the one hand with the eager, sensitive mind of a child and on the other hand with a world of complex physical nature... that it seems hopeless to reduce it to order and knowledge... (and) in a mood of self-defeat... exclaim, ‘How can I possibly teach my child about nature - (when) I don’t even know one bird from another’”.

Our interpretation:

The relationship should be one of enjoyment and learning together. It is an opportunity for caregivers and teachers to assist children in gathering and discovering information: paying attention to colors, patterns, and natural materials; listening to sounds; exploring shapes, textures, and weights; noticing actions, rhythms, and smells; asking intriguing questions and conversing about possible explanations; and sensing the moods that are created. Children and caregivers can further investigate the experiences utilizing the many resources available. Apps, field guides, nature idea books, nature story books, nature education centers, and websites are some of the many resources available.
Quotation

I sincerely believe that for the child, and for the (caregiver) seeking to guide him, it is not half as important as to feel.

Our interpretation:

Environmental education for young children should focus on helping children develop an emotional connection with nature and the environment around them. Children’s curiosities serve as the basis of building interest and motivation in learning about the natural world, and children need the enjoyment that comes from engaging, learning, understanding, and problem-solving. These experiences are best enjoyed in the company of their loved caregivers and teachers.

Quotation

If facts are the seeds that later produce knowledge and wisdom, then the emotions and the impression of the senses are fertile soil in which the seeds must grow.

Our interpretation:

Sensory experiences, and the affirming and encouraging emotions associated with the use of the senses, are fundamental processes in the development of children’s dispositions, knowledge, and skills. Repeated experiences, as well as differing experiences, are required for growth to occur. Should the emotions and the sensory experiences be less than satisfactory, there is a chance that children will be turned off and be less willing to engage in future experiences.

Quotation

The years of early childhood are the time to (arouse)... a sense of the beautiful, the excitement of the new and the unknown, a feeling of sympathy, admiration.
Our interpretation:

The importance of the early formative years cannot be understated. Attachment to nature, along with the sense that nature is an incredible place of learning, is important to cultivate. As caregivers and teachers, we must provide abundant opportunities that allow children to spend time in natural environments. Children are encouraged to ask questions, imagine and think, observe, and use or manipulate naturally found materials. Opportunities for children to creatively express their feelings and understanding of the natural world, too, are a part of the experience in developing greater attachment with the natural world.

Quotation

*Once (emotional responses have been established), it has lasting meaning. It is more important to pave the way for the child to want to know than to put him on a diet of facts he is not ready to assimilate.*

Our interpretation:

In the early years, teaching should be more about helping children develop a sense of enjoyment and deep satisfaction that come from observations, interactions with, and personal discoveries about the world of nature. It is through the processes of enjoyment in which children best construct knowledge and practice skills. The caregivers and teachers are available to guide and respond as needed or when appropriate. Altogether, these experiences aid in the continued want of learning about the world of nature.

Quotation

*Exploring nature with your child is largely a matter of becoming receptive to what lies all around you. It is learning again to use your eyes, ears, nostrils, and finger tips, opening up channels of sensory impression.*

Our interpretation:

From the northwest coasts of Oregon to the southeast coasts of Florida, and all around the world, nature abounds and can reawaken desires for learning, as children would experience when given the encouragement and guidance. Environmental education centers, programs offered by local nature organizations,
and frequent field trips to places of natural beauty, including what is right outside your door and other nearby places such as gardens and parks, can be sources of information and inspiration to get you started.

We believe a positive and warm regard for the world of nature is an essential ingredient that fosters the achievement of the larger goals related to “values and attitudes, skills and behavior consistent with sustainable development and effective... public participation in decision-making” (United Nations Environment Programme, 1992). This regard is required of both adults and children, as implied in the verses provided by Rachel Carson - and should be a focal point of curriculum and creative strategies in child development centers, community initiatives, and environmental education efforts.

We call on all those in close contact with children to create “experiences that sustain” as well as “sustained experiences” that build increasing capacities in children’s positive and warm regard for nature. In Re-Connecting the World’s Children to Nature (World Forum-Nature Action Collaborative for Children, Nebraska Nature Action Collaborative for Children, & National Association of Early Childhood Specialists in State Departments of Education, 2008), concrete ideas are provided for “making developmentally appropriate nature education a sustaining and enriching, fully integrated part of the daily lives and education of the world’s children” (p. 1). The document can be accessed at http://www.worldforumfoundation.org/wf/nacc/call_to_action.pdf at no cost. In it, implications for both curriculum and leadership at multiple levels are articulated. Daily unstructured and semi-structured experiences in largely natural environments, creation of easier and greater access to places of nature, innovative curriculum developed through collaborative partnerships, and adoption of policies that provide support for nature-integrated curriculum are a few of the ideas provided in the document.
References


Dr. Yash Bhagwanji is Associate Professor and Coordinator of Early Childhood Programs at Florida Atlantic University in Boca Raton, Florida. He can be reached at ybhagwan@fau.edu.

Dr. Bora Simmons is Director of the National Project for Excellence in Environmental Education and Senior Research Associate at University of Oregon’s Institute for a Sustainable Environment. She can be reached at borasimmons@gmail.com.