What is Ecological Literacy? (David Orr, Fritjof Capra, Daniel Goleman):

- Our ability to understand the basic principles of ecology and live accordingly
- Integrates three forms of intelligence - emotional, social and ecological
- Empathy is key to becoming "ecoliterate"
- An ecologically literate person is able to examine the world from an expanded perspective - from self, to others, to all living systems.

Why Ecoliteracy?

The Future

- Essential for the long term sustainability of human civilization
- We must understand how nature organizes itself and model our cities, products and institutions on nature’s designs.
- Ecological sustainability requires new habits of mind, heart and hand.

The Present

- Kids today spend over 50 hours a week on some device and 90% of their time indoors.
- Childhood obesity has increased from 7% in the 1980’s to 18% in 2012.
- Preschool kids are the fastest growing market for antidepressants

“The children and nature movement is fueled by this fundamental idea: the child in nature is an endangered species, and the health of children and the health of the earth are inseparable.” (Richard Louv)

Benefits of Nature include:

- Improved health outcomes
- Stronger academic performance
- Increased opportunities for social and emotional learning
- Strong social connections to family members and community
- Increased creativity, self-esteem, focus, cooperation, and executive function

Montessori & Ecoliteracy: A Natural Symbiosis

“The land is where our roots are. The children must be taught to feel and live in harmony with the earth.” (Montessori)

“Education is a natural process carried out by the child and is not acquired by listening to words but by experiences in the environment.” (Montessori)
Connecting Theory to Practice

You can view and download the Prezi at:
http://tinyurl.com/cultivating-ecoliteracy-prezi

Shifting the Mindset: The Roots of Ecoliteracy

The Universe Story: Extending Our Time Horizons Through “Big” History
- Living in the Ecozoic Era (A Story of Hope vs. Despair)

The Art & Science of Systems Thinking: Seeing An Interconnected World
- A World of Systems (Identifying Types)
- How Systems Work (Experiencing Archetypes)
- Principles of Ecology (The Nature of Nature)

Embracing Deep Ecology: Viewing Humans As Part of Nature
- Beyond Ecophobia (Love Conquers Fear)
- The Web of Life (A Communion of Subjects)

From Ecoliteracy to Ecodesign: Biomimicry As Sustainable Solution
- Biomimicry by Janine Benyus
- One Example: The principle “Waste = Food” leads to “Reduce, Reuse, Recycle”
- “Bioneers” have developed many practical applications (e.g. bullet trains in Japan are inspired by Kingfishers)
Montessori: An Ecological Approach

- The Whole Child As Self-Organizing Learner
- The Prepared Environment as Ecosystem of Learning
- A Diverse, Multiage Community of Learners
- Information Flows through Work Cycle
- Dynamic Balance Through Freedom with Responsibility
- Development of Classroom & School Environments Over Time (Ecological Succession)

Greening Montessori: Ecoliteracy Across the Ages

Our Cosmic Curriculum: A New Perspective On What We Already Do

- The Great Lessons (Making Interdependence Concrete)
- Fundamental Needs of Humans (Unity Within Diversity)
- Montessori Biology (Classifying & Analyzing Living Systems)
- Montessori Geography (Connecting Species & Environments)

Pedagogy of Place: From the Global to the Local Environment

- Goings Out (Connecting Through Our Senses)
- Green Schoolyards (What Every Child Deserves)

Ecological Routines & Rituals: Reducing Our Ecological Footprint

- Food (Awareness of Nutrition & Impact)
- Clothing (Making Threads Last)
- Shelter (The Promise of Green Buildings)
- Transportation (Reducing Emissions One Ride at a Time)
- Stuff (Practicing Needs vs. Wants)
Cultivating Ecoliteracy the Montessori Way

- Build Empathy
- Make It Concrete
- Observe to Understand
- Learn to Think & Act Cooperatively

Using the “Cultivating Ecoliteracy” Toolkit

You can access the toolkit at the following link:
http://tinyurl.com/cultivating-ecoliteracy

Help Us Make It Better!

If you have lesson plans, routines or resources related to ecoliteracy that would be helpful to others, email us and upload to the “Ideas & Submissions” folder in the toolkit. We will contact you to integrate them into the structure of the toolkit with you listed as the “owner” of the materials.
SELECTED RESOURCES ON ECOLITERACY

Books:

Websites:
Biomimicry Institute http://biomimicry.org
Center for Ecoliteracy www.ecoliteracy.org
The Cloud Institute http://cloudinstitute.org
Children & Nature Network www.childrenandnature.org
Creative Learning Exchange www.clexchange.org
Macy, Joanna. Welcome to All Beings http://jjoannamacy.net
Sweeney, Linda Booth www.lindabooshtsweeney.net
Promise of Place http://promiseofplace.org
Robertson, Katie. "Wholemindesign." http://wholemindesign.com