

Forum on Religion and Ecology
Education Annotated Bibliography

Journals:

Applied Environmental Education and Communication: An International Journal 2002+
Australian Journal of Environmental Education 1985+
Canadian Journal of Environmental Education 1996+
Environmental Education Research 1995+
Journal of Adventure Education and Outdoor Learning 2000+
Journal of Environmental Education 1969+
New England Journal of Environmental Education 1986+

Books:

Ahlberg, Mauri and Walter Leal Filho, eds. *Environmental Education for Sustainability: Good Environment, Good Life*. Frankfurt and New York: Peter Lang, 1998.

This book is a collection of writings that apply environmental education to issues of educating for sustainability. The essays are written by authors who have different perspectives and come from various geographical regions from around the globe. This book presents multiples and varied approaches to environmental education, both with a view to in-depth information about important problems in the field and with a view to general trends and projects that characterize concrete actions in the field.

Armitage, Kevin C. *The Nature Study Movement: The Forgotten Popularizer of America's Conservation Ethic*. Lawrence, KS: The University Press of Kansas, 2009.

Beginning in the late nineteenth century, thousands of Americans turned to an unexpected pastime that had been theirs to take up all along: the study of nature. Armed with cameras and collecting jars, everyday citizens wandered the country's forests, prairies, and mountains to gain an appreciation of local flora and fauna and to escape the increasingly industrialized world as well.

Kevin Armitage presents the first comprehensive history of the nature study movement, demonstrating its significance to American environmental thought and politics. He shows how nature study, as both a pedagogic and popular idea, has had a lasting effect on American culture and society, and his reevaluation of the movement has much to tell us about the American relationship with the nonhuman world.

Barlett, Peggy F. and Geoffrey W. Chase, eds. *Sustainability in Higher Education: Stories and Strategies for Transformation*. Cambridge, MA: The MIT Press, 2013.

In colleges and universities across the United States, students, faculty, and staff are forging new paths to sustainability. From private liberal arts colleges to major research institutions to community colleges, sustainability concerns are being integrated into curricula, policies, and programs. New divisions, degree programs, and courses of study cross traditional disciplinary boundaries; Sustainability Councils become part of campus governance; and new sustainability issues link to historic social and educational missions. In this book, leaders from twenty-four colleges and universities offer their stories of institutional and personal transformation. These stories document both the power of leadership -- whether by college presidents, faculty, staff, or student activists -- and the potential for institutions to redefine themselves. Chapters recount, among other things, how inclusive campus governance helped mobilize students at the University of South Carolina; how a course at the Menominee Nation's tribal college linked sustainability and traditional knowledge; how the president of Furman University convinced a conservative campus community to make sustainability a strategic priority; how students at San Diego State University built sustainability into future governance while financing a LEED platinum-certified student center; and how sustainability transformed pedagogy in a lecture class at Penn State. As this book makes clear, there are many paths to sustainability in higher education. These stories offer a snapshot of what has been accomplished and a roadmap to what is possible. Colleges and Universities covered include Arizona State University • Central College, Iowa • College of the Menominee Nation, Wisconsin • Curriculum for the Bio-region Project, Pacific Northwest • Drury University, Missouri • Emory University, Georgia • Florida A&M University • Furman University, South Carolina • Green Mountain College, Vermont • Kap'olani Community College, Honolulu, Hawaii • Pennsylvania State University • San Diego State University • Santa Clara University, California • Slippery Rock State University, Pennsylvania • Spelman College, Georgia • Unity College, Maine • University of Hawaii--Manoa • University of Michigan • University of South Carolina • University of South Florida • University of Wisconsin--Oshkosh • Warren Wilson College, North Carolina • Yale University.

----- . *Sustainability on Campus: Stories and Strategies for Change*. Cambridge, MA: Massachusetts Institute of Technology, 2004.

This is a collection of sixteen narratives written by students, faculty, staff, and administrators who present reflections on various experiences with greening college and university campuses, particularly since environmental awareness on campus has become increasingly common since Earth Day, 1970. The writings in this collection show that participatory engagements and committed activism are necessary if any effort to achieve ecological sustainability is going to be successful. The stories recounted in this book involve eighteen different colleges and universities.

Barlow, Zenobia and Margo Crabtree, eds. *Ecoliteracy: Mapping the Terrain*. Berkeley, CA: Learning in the Real World, 2000.

Educational sourcebook published by the Center for Ecoliteracy in Berkeley, California. The Center for Ecoliteracy's stated mission is to support and advance education for

sustainable living. It was founded in 1995 by philanthropist Peter Buckley, physicist/author Fritjof Capra, and think tank director Zenobia Barlow to apply ecological, systems thinking principles to K-12 education. The Center for Ecoliteracy has supported projects in habitat restoration, school gardens and cooking classes, partnerships between farms and schools, school food transformation, and curricular innovation. Together with the Chez Panisse Foundation and Berkeley Unified School District, the Center for Ecoliteracy implemented the School Lunch Initiative to provide local, seasonal, and sustainable meals for students as well as experiential learning in gardens, kitchen classrooms, and cafeterias. Using a systems approach, the Rethinking School Lunch program offers a planning strategy for revamping food service programs. The Center for Ecoliteracy's initiative, Smart by Nature: Schooling for Sustainability, aims to provide a framework based on four guiding principles: "Nature is Our Teacher," "Sustainability is a Community Practice," "The Real World is the Optimal Learning Environment," and "Sustainable Living is Rooted in a Deep Knowledge of Place." It identifies four potential pathways to schooling for sustainability—food, campus, community, and teaching and learning.

Bartels, Kirsten Allen and Kelly A. Parker, eds. *Teaching Sustainability/Teaching Sustainably*. Sterling, VA: Stylus Publishing, 2011.

Over the coming decades, every academic discipline will have to respond to the paradigm of more sustainable life practices because students will be living in a world challenged by competition for resources and climate change, and will demand that every academic discipline demonstrate substantial and corresponding relevance. This is the premise the book takes as its point of departure that integrating a component of sustainability into a discipline-specific course arises from an educator asking a simple question: in the coming decades, as humanity faces unprecedented challenges, what can my discipline or area of research contribute toward a better understanding of these issues?

The discipline need not be future-oriented: an archaeologist, for instance, could incorporate into a course some aspects of sustainable archaeological practices in areas threatened by rapid climate change, as well as examples of sustainable or unsustainable ways of living practiced by members of the long-gone society under investigation.

This book also argues that courses about sustainability need to cross disciplinary boundaries, both because of the inter-relatedness of the issues, and because students will require the ability to use interdisciplinary approaches to thrive through the multiple careers most of them will face.

The contributions to this book are presented under four sections. "Sustainability as a Core Value in Education" considers the rationale for incorporating sustainability in disciplinary courses. "Teaching Sustainability in the Academic Disciplines" presents eight examples of courses from disciplines as varied as agriculture, composition, engineering, and teacher education. "Education as a Sustainable Practice" reviews how the physical environment of the classroom and the delivery of instruction need themselves to reflect the values being taught. The final section addresses the issues of leadership and long-term institutional change needed to embed sustainable practice as a core value on campus.

Basile, Carole, Cameron White, and Stacey Robinson. *Awareness to Citizenship: Environmental Literacy for the Elementary Child*. Lanham, MD: University Press of America, 2000.

This is primarily a resource for environmental educators, teachers, and parents who are interested in teaching environmental literacy to children. The book discusses approaches to pedagogy that help children learn how to discuss and think critically about the environment. With this awareness of the environment, children are equipped to learn how to participate actively as engaged citizens within their communities.

Berkes, Fikret. *Sacred Ecology*. New York: Routledge, 2012.

Sacred Ecology examines bodies of knowledge held by indigenous and other rural peoples around the world, and asks how we can learn from this knowledge and ways of knowing. Berkes explores the importance of local and indigenous knowledge as a complement to scientific ecology, and its cultural and political significance for indigenous groups themselves. This third edition further develops the point that traditional knowledge as process, rather than as content, is what we should be examining. It has been updated with about 150 new references, and includes an extensive list of web resources through which instructors can access additional material and further illustrate many of the topics and themes in the book.

Berry, Thomas. *The Great Work: Our Way into the Future*. New York: Bell Tower, 1999.

In this book, Berry suggests ways to facilitate a transition from the cultural traditions that have supported the destruction and devastation of the planet to new cultural traditions that situate the human being in mutually enhancing relations with life systems, with the planet, and with the evolutionary processes of the cosmos. These new cultural traditions would help the human enter an Ecozoic era, in which humans would start seeing the world as a “communion of subjects” and not as the mere “collection of objects” to which modern science reduces the universe. Berry discusses the implications of the transition to an Ecozoic era for the university and for other educational institutions.

Blewitt, John and Cedric Cullingford, eds. *The Sustainability Curriculum: The Challenge for Higher Education*. London: Earthscan Publications, 2004.

This is a collection of writings on the relationship between sustainability and higher education. Along with an introductory essay and a conclusion essay that provide general remarks about sustainability in higher education, other essays cover topics related to education for sustainability, including the following: sustainability in higher education and in lifelong learning and sustainability, international developments in sustainability education, eco-design, gender in sustainable development education, the built environment, transportation, accounting, economics, social policy, sociology, politics, geography, and philosophy. There are 18 essays, with contributions from John Blewitt, Cedric Cullingford, Stephen Sterling, Jenneth Parker, Ros Wade, Hugh Atkinson, Peter Hopkins, Peter James, Adam Van Winsum, Jack Bradley, Joanne Crowther, Karen Warren, Brain Edwards, Colin Bamford, Christopher Cowton, Mark Baimbridge, Meg

Hugby, Matthew Smith, John Donnelly, Andre Parker, Robert Garner, Phil McManus, and Clare Palmer.

Bodzin, Alec, Beth Shiner Klein and Starlin Weaver, eds. *The Inclusion of Environmental Education in Science Teacher Education*. New York, NY: Springer, 2010.

In the coming decades, the general public will be required ever more often to understand complex environmental issues, evaluate proposed environmental plans, and understand how individual decisions affect the environment at local to global scales. Thus it is of fundamental importance to ensure that higher quality education about these ecological issues raises the environmental literacy of the general public. In order to achieve this, teachers need to be trained as well as classroom practice enhanced. This volume focuses on the integration of environmental education into science teacher education. The book begins by providing readers with foundational knowledge of environmental education as it applies to the discipline of science education. It relates the historical and philosophical underpinnings of EE, as well as current trends in the subject that relate to science teacher education. Later chapters examine the pedagogical practices of environmental education in the context of science teacher education. Case studies of environmental education teaching and learning strategies in science teacher education, and instructional practices in K-12 science classrooms, are included. This book shares knowledge and ideas about environmental education pedagogy and serves as a reliable guide for both science teacher educators and K-12 science educators who wish to insert environmental education into science teacher education. Coverage includes everything from the methods employed in summer camps to the use of podcasting as a pedagogical aid.

Bonnett, Michael. *Moral Education and Environmental Concern*. New York, NY: Routledge, 2013.

This volume explores both some important ways in which moral values are embedded in much current discussion of environmental issues, as well as ways in which some conventional understandings of morality and moral education can be transformed by ideas that have emerged in the discourse of environmental concern. Contributions range from a variety of disciplines including philosophy, psychoanalysis, social psychology, and anthropology, and reflect a variety of cultural settings including Occidental, Oriental, African, and South American. The book discusses the moral character of our relationship with the natural world; the quality of the relationship between our “internal” and “external” worlds; the issues that arise when responsibilities towards future generations are considered; and the need for cultural change and the practical obstacles to achieving this in a school context. In the process, insights are drawn from Western philosophy, Buddhism, Daoism, Ubuntu, and Confucianism. The result is a collection that provides a rich backcloth for understanding, and in some cases reconceptualizing, morality in an age of growing environmental concern, and its extensive implications for the theory and conduct of moral education.

-----, *Retrieving Nature: Education for a Post-Humanist Age*. Malde, MA: Blackwell Publishing, 2004.

In this book, the author proposes a framework for environmental education after the modern age of anthropocentrism and humanism. Bonnett argues that the current system of education perpetuates many modern metaphysical notions about the meaning of nature, reality, humanity, and knowledge. Whereas modern metaphysics views humans and nature as disconnected, Bonnett proposes a system of education that would retrieve a sense of the relationship between humans and nature such that sustainability and environmental ethics become frames of mind and not only matters of policy.

Bowers, C. A. *The False Promises of the Digital Revolution: How Computers Transform Education, Work, and International Development in Ways that are Ecologically Unsustainable*. New York, NY: Peter Lang International Academic Publishers, 2014.

The False Promises of the Digital Revolution examines what currently goes largely unnoticed because of the many important uses of digital technologies. While many people interpret digital technologies as accelerating the global rate of progress, C. A. Bowers focuses attention on how they reinforce the deep and ecologically problematic cultural assumptions of the West: the myth of progress, the substitution of data for different cultural traditions of wisdom, the connections between print and abstract thinking, the myth of individual autonomy, the conduit view of language that hides how words (metaphors) reproduce earlier misconceptions, and a Social Darwinian justification for colonizing other cultures that is now leading to armed resistance - which, in turn, strengthens the ties between corporations, the military, and the computer science industry. The book also investigates how to understand the cultural non-neutrality of digital technologies; how print and the emphasis on data undermine awareness of the tacit information pathways between cultural and natural ecologies; and how to identify educational reforms that will contribute to a more informed public about the uses of digital technologies.

-----, *Mindful Conservatism: Rethinking the Ideological and Educational Basis of an Ecologically Sustainable Future*. Landham, MD: Rowman and Littlefield Publishers, 2003.

Bowers rethinks the question of conservatism through critical reflection on the use and abuse of the term, both in light of its general ideological implications and in light of its role in the educational process. In contrast to forms of conservatism that seek to conserve modern traditions and ideologies (e.g., progress, economic growth, technological solutions) at the expense of the environment, Bowers proposes a conservatism that seeks to conserve all of the world's diverse cultures along with the ecological systems in which they are situated. Bowers argues that a move toward a sustainable culture requires a turn away from the modern values of anthropocentrism, consumerism, commodification, and development.

-----, *Detras de la Apariencia: Hacia la Descolonizacion de la Educacion*. Lima, Peru: PRATEC, 2002.

----- . *Educating for Eco-Justice and Community*. Athens, GA: University of Georgia Press, 2001.

Bowers criticizes mainstream theories of education, showing how they support the presuppositions of modernity while ignoring the implications of the ecological crisis. Bowers show in particular how modern theories of education foster the sort of attitudes and practices that characterize relations between humans and the natural environment that dominated modern movements such as industrialization and the Enlightenment. In contrast, Bowers proposes an approach to pedagogy and curriculum that is rooted in community and eco-justice. There is also an appendix that contains a preamble, listing some principles of environmental justice.

----- . *Let Them Eat Data: How Computers Affect Education, Cultural Diversity, and the Prospects of Ecological Sustainability*. Athens, GA.: University of Georgia Press, 2000.

Bowers presents a critique of the role of computer technology in education in light of its cultural and ecological implications. Bowers argues that the emphasis on computer innovations for education is indicative of the modern understanding of progress and consumerist values of industrialism, colonialism, and the free market economy. Bowers points out that these values have supported the ecological degradation that has accompanied modern processes of industrialization, colonization, commodification, and globalization. Along with its ecological problem as a threat to sustainability, computers also threaten to cultural diversity as they homogenize the world with a global colonialism.

----- . *The Culture of Denial: Why the Environmental Movement Needs a Strategy for Reforming Universities and Public Schools*. Albany, NY: State University of New York Press, 1997.

In this work, Bowers argues that the entire educational system is in need of radical reform, from primary grades through higher education. Bowers criticizes current educational institutions, particularly insofar as they participate in the culture of denial, which perpetuates the social and economic practices that have accompanied the rise of the current environmental crisis (e.g., practices such as those associated with industrialization, globalization, and capitalism). Bowers proposes a reform that would move away from the anthropocentrism of the current educational system and move toward a more ecologically centered approach to education, which entails new concepts of intelligence, creativity, morality, and experiential learning. The last chapters discuss ways in which environmentalists can contribute to strategies for such an ecologically centered education.

----- . *Educating for an Ecologically Sustainable Culture: Rethinking Moral Education, Creativity, Intelligence, and Other Modern Orthodoxies*. Albany, NY: State University of New York Press, 1995.

This book criticizes the current educational system for undermining the efforts of

environmentalists to secure a sustainable future. Bowers proposes a reform in education that would support an ecologically sustainable culture by rethinking basic concepts and practices of education. Bowers discusses the role of creativity, intelligence, trans-generational communication, and community in an ecological education. Bowers also provides some critical remarks about the role of computers in the educational process.

----- . *Education, Cultural Myths, and the Ecological Crisis: Toward Deep Changes*. Albany, NY: State University of New York Press, 1993.

In this work, Chet Bowers describes the importance of environmental education in facilitating a viable response to the challenges of the current ecological crisis. Following a brief introduction, Bowers discusses the current ecological crisis, particularly in terms of its cultural aspects, including the current educational crisis. Bowers criticizes the technocratic and anthropocentric tendencies that currently dominate the educational process. In calling for “deep changes” in this process, Bowers argues that a new sense of balance can emerge through a politically and spiritually informed approach to the ecological crisis.

Broda, Herbert W. *Moving the Classroom Outdoors: Schoolyard-Enhanced Learning in Action*. Portland, ME: Stenhouse Publishers, 2011.

Since Herb Broda published *Schoolyard-Enhanced Learning*, his groundbreaking first book on outdoor learning, many schools across North America have embraced the benefits of “greening” their learning programs. Herb has visited dozens of these schools and nature centers, and he showcases the very best examples of schoolyard-enhanced learning in action in his new book *Moving the Classroom Outdoors*, complete with photos of a wide variety of outdoor learning environments. Designed to provide teachers and administrators with a range of practical suggestions for making the schoolyard a varied and viable learning resource, *Moving the Classroom Outdoors* presents concrete examples of how urban, suburban, and rural schools have enhanced the school site as a teaching tool. Herb focuses on the practical and the specific, including ideas for seating, signage, planting considerations, teaching/meeting areas, outdoor classroom management, pathways, equipment storage, raised gardens, and more. The book also provides an outdoor activity sampler, information on incorporating technology into the outdoor learning experience, and a chapter on the unique concerns of urban schools.

----- . *Schoolyard-Enhanced Learning: Using the Outdoors as an Instructional Tool, K-8*. Portland, ME: Stenhouse Publishers, 2007.

Schoolyard-Enhanced Learning shows how the school grounds—regardless of whether your school is in an urban, suburban, or rural setting—can become an enriching extension of the classroom. In this comprehensive handbook, Herb Broda blends theory and practice, providing readers with practical suggestions and teacher-tested activities for using the most powerful audio-visual tool available—the outdoors. Emphasizing the practical, this innovative book offers teachers step-by-step guidance to help ensure success when they take a class outside. It provides: 1) Background that helps present the

case for outdoor learning: educational theory that supports the concept; overview of the terminology; research on the benefits related to student achievement; alignment of outdoor learning with current teaching practices. 2) Ideas for making the schoolyard an effective outdoor classroom: the planning process; enhancing and maintaining the site; developing gardens and attracting wildlife; finding community resources and funding. 3) Advice on working with a class outdoors: garnering administrative and parental support; considerations before going out; making the most of your outdoor time; using GPS as an educational tool; building on the outdoor experience back in the classroom. 4) An array of proven activities that utilize the schoolyard: activities related to specific subject areas; activities that teach process skills; activities that encourage initiative and build community. At a time when children's natural curiosity about the outdoors is eclipsed by the demands of busy schedules and the ever-present glow of video screens, schools may be the only place where they are encouraged to interact with nature. *Schoolyard-Enhanced Learning* can help teachers unlock the powerful learning experiences that exist just beyond the classroom door.

Bucklin-Sporer, Arden and Rachel Pringle. *How to Grow a School Garden: A Complete Guide for Parents and Teachers*. Portland, OR: Timber Press, Inc., 2010.

In this groundbreaking resource, two school garden pioneers offer parents, teachers, and school administrators everything they need to know to build school gardens and to develop the programs that support them. Today both schools and parents have a unique opportunity — and an increasing responsibility — to cultivate an awareness of our finite resources, to reinforce values of environmental stewardship, to help students understand concepts of nutrition and health, and to connect children to the natural world. What better way to do this than by engaging young people, their families, and teachers in the wondrous outdoor classroom that is their very own school garden? It's all here: developing the concept, planning, fund-raising, organizing, designing the space, preparing the site, working with parents and schools, teaching in the garden, planting, harvesting, and even cooking, with kid-friendly recipes and year-round activities. Packed with strategies, to-do lists, sample letters, detailed lesson plans, and tricks of the trade from decades of experience developing school garden programs for grades K–8, this hands-on approach will make school garden projects accessible, inexpensive, and sustainable. Reclaiming a piece of neglected play yard and transforming it into an ecologically rich school garden is among the most beneficial activities that parents, teachers, and children can undertake together. This book provides all the tools that the school community needs to build a productive and engaging school garden that will continue to inspire and nurture students and families for years to come.

Caeiro, Sandra, Walter Leal Filho, Charbel Jabbour, and Ulisses M. Azeiteiro, eds. *Sustainability Assessment Tools in Higher Education Institutions: Mapping Trends and Good Practices Around the World*. New York, NY: Springer, 2013.

This book contributes to debates on current sustainability practices, with a focus on assessment tools as applied in higher education institutions. These institutions are challenged to carry out management, research, and teaching, and to create settings that

allow developing new competencies to address the complex global environmental, social, cultural, and economic pressures with which current and future generations are confronted. The first chapters discuss issues of sustainability in higher education, namely the role of universities in promoting sustainability and the emergent fields of sustainability science and education for sustainable development and how to integrate and motivate sustainability into the university. Subsequent chapters present examples of sustainability assessment tools specifically developed for higher education institutions, such as the AISHE – Auditing Instrument for Sustainability in Higher Education, the GASU – Graphical Assessment of Sustainability in Universities too, the STAUNCH – Sustainability tool for Auditing Universities Curricula in Higher Education. The use of other integrated tools is also presented. The papers have adopted a pragmatic approach, characterized by conceptual descriptions, including sustainability assessment and reorienting the curricula, on the one hand, and practical experiences on the other, with good practices from different edges of the world. *Sustainability Assessment Tools in Higher Education Institutions* will be of interest to graduate student, lecturers, researchers, and those setting university policy.

Cajete, G. *Look to the Mountain: An Ecology of Indigenous Education*. Durango, CO: Kivaaki Press, 1994.

This work presents an account of indigenous education in light of American Indian tradition of teaching and learning. Indigenous education includes myth, spirituality, art, and visionary traditions in its approaches to teaching and learning, while also emphasizing an orientation to community and to the natural world. The author shows how attention to indigenous education can transform American Indian communities while also transforming the modern system of education in America. The final chapter articulates seven core courses for a curriculum in indigenous science, and an appendix provides a list of principles that can be used for work with any age group in presenting holistic lessons.

Callicott, J. Baird and Fernando J. R. da Rocha, eds. *Earth Summit Ethics: Toward a Reconstructive Postmodern Philosophy of Environmental Education*. Albany, NY: State University of New York Press, 1996.

This book is an outgrowth of a 1992 conference in Porto Alegre, Brazil, which aimed to articulate the philosophical implications of the Earth Summit held in Rio de Janeiro the same year. The essays in this volume focus on the principles of the Earth Summit in terms of links between environmental ethics and university education. Contributions include the following: "Introduction: Ethics, University, and Environment" by J. Baird Callicott and Fernando J.R. da Rocha; "Science, Technology, Economics, Ethics, and Environment" by José Lutzenberger; "The Ethics of Dialogue and the Environment: Solidarity as a Foundation for Environmental Ethics" by Nicholas M. Sosa; "What Can Universities and Professional Schools Do to Save the Environment?" by Peter Madsen; "Incontinence, Self-Deception, Shallow Analysis, Myth-making, and Economic Rationality: Their Bearing on Environmental Policy" by Andrew Brennan; "Ethics, Politics, Science, and the Environment: Concerning the Natural Contract" by Catherine

Larrere; "Benevolent Symbiosis: The Philosophy of Conservation Reconstructed" by J. Baird Callicott; "Earth Ethics: A Challenge to Liberal Education" by Holmes Rolston; an Afterword on "University Education in Sustainable Development and Environmental Protection" by John Lemons; and there is an appendix that contains "The Porto Alegre Declaration on University, Ethics and Environment."

Clarke, Paul. *Education for Sustainability: Becoming Naturally Smart*. New York, NY: Routledge, 2012.

In this book, Paul Clarke argues that in order to live sustainably we need to learn how to live and flourish in our environment in a manner that uses finite resources with ecologically informed discretion. Education is perfectly placed to create the conditions for innovative and imaginative solutions and to provide the formulas that ensure that everyone becomes naturally smart; but to achieve this, we need to recognize that an education that is not grounded in a full understanding of our relationship with the natural world is no education at all. In other words, a total transformation of schools and schooling is needed.

Clayton, Susan and Gene Myers. *Conservation Psychology: Understanding and Promoting Human Care for Nature*. Hoboken, NJ: Wiley-Blackwell, 2009.

This textbook introduces the reader to the new and emerging field of Conservation Psychology, which explores connections between the study of human behavior and the achievement of conservation goals. People are often cast as villains in the story of environmental degradation, seen primarily as a threat to healthy ecosystems and an obstacle to conservation. But humans are inseparable from natural ecosystems. Understanding how people think about, experience, and interact with nature is crucial for promoting environmental sustainability as well as human well-being. The book first summarizes theory and research on human cognitive, emotional, and behavioral responses to nature and goes on to review research on people's experience of nature in wild, managed, and urban settings. Finally, it examines ways to encourage conservation-oriented behavior at both individual and societal levels. Throughout, the authors integrate a wide body of published literature to demonstrate how and why psychology is relevant to promoting a more sustainable relationship between humans and nature.

Clover, Darlene Elaine, ed. *Global Perspectives in Environmental Adult Education*. New York: Peter Lang, 2003.

This is a collection of essays that discuss the importance of environmental education for adults, particularly insofar as adults can use ecological knowledge to facilitate social and political actions. The essays in this volume are global in their perspectives, with contributors from various geographical regions, including the United States, Canada, Mexico, Fiji, Australia, Sudan, Kenya, the Philippines, and India. Some of the issues discussed in this volume include, colonization, globalization, international development, community resistance movements, environmental racism, feminism, indigenous knowledge, ecology, and participatory research practice.

Collett, Jonathan and Stephen Karakashian, eds. *Greening the College Curriculum: A Guide to Environmental Teaching in the Liberal Arts*. Washington, D.C.: Island Press, 1996.

This is a collection of writings that explore various ways in which environmental teaching can be integrated into liberal arts in colleges and universities. There are essays that rethink and reinvent higher education and the structure of the classroom, and there are more specific essays that focus on environmental teaching in a particular discipline (e.g., anthropology, biology, economics, geography, history, literature, media/journalism, philosophy, political science, and religion). Contributors include David Orr, William Blake, David G. Campbell, Vern Durkee, Gerald Alonzo Smith, Lisa Naughton-Treves, Emily Young, John Opie, Michael Black, Vernon Owen Grumbling, Karl Grossman, Ann Filemyr, Holmes Rolston, Michael E. Kraft, Steven Rockefeller, and Jonathan Collett.

Corcoran, Peter Blaze, Philip M. Osaro, Joseph Paul Weakland, and Brandon P. Hollingshead, eds. *Young People, Education, and Sustainable Development: Exploring Principles, Perspectives, and Praxis*. Wageningen: Wageningen Academic Publishers, 2009.

Young people have an enormous stake in the present and future state of Earth. Almost half of the human population is under the age of 25. If young people's resources of energy, time, and knowledge are misdirected towards violence, terrorism, socially-isolating technologies, and unsustainable consumption, civilization risks destabilization. Yet, there is a powerful opportunity for society if young people can participate positively in all aspects of sustainable development. In order to do so, young people need education, political support, resources, skills, and hope. This volume offers a global perspective on education initiatives by and for young people that promote a transition to sustainability. It includes 38 essays co-authored by 68 contributors from 25 nations, representing a diversity of geography, gender, and generation.

Corcoran, Peter Blaze and Arjen E. J. Wals, eds. *Higher Education and the Challenge of Sustainability: Problematics, Promise, and Practice*. Dordrecht: Springer, 2004.

This is a collection of 27 essays, which are divided into three sections: the problematic, promise, and practice of sustainability in education. The section on problematic discusses concepts of sustainability and its role in higher education. The next section focuses on promises of sustainability in education from a variety of movements, including environmental education, environmental justice, deep ecology, ecofeminism, natural resource management, and whole systems design. The section on practice focuses on particular case studies of sustainability education from around the world, with reference to communities in the United States, the United Kingdom, South Africa, and Denmark. Each section begins with an introductory essay for the topic covered therein and ends with a concluding essay that synthesizes the issues in the section.

Cornell, Joseph. *Sharing Nature with Children*. Nevada City, CA: Dawn Publications, 1998.

As Joseph Cornell's classic book reached its 20th anniversary, Cornell drew upon a wealth of experience in nature education to significantly revise and expand his book. New nature games—favorites from the field—and Cornell's typically insightful commentary makes the second edition of this special classic even more valuable to nature lovers world-wide. The Sharing Nature movement that Cornell pioneered has now expanded to countries all over the globe. This book is recommended by Boy Scouts of America, American Camping Association, National Audubon Society and many others.

Cotton, Mathew C and Ronald S. Laura. *Empathetic Education: An Ecological Approach*. London: Falmer Press, 1999.

Cotton and Laura propose a paradigm of environmental education founded on an empathetic relationship between humans and the natural world. This empathetic paradigm of environmental education is contrasted with the current educational paradigm, which presupposes a mechanist and reductionist approach to the relations between humans and the environment. Whereas the current paradigm indoctrinates students into the values of technological development and the exploitation of nature, an empathetic paradigm affirms an underlying connectedness between humans and nature. The authors reflect on systems theory and quantum physics to support their empathetic paradigm.

Creighton, Sarah. *Greening the Ivory Tower: Improving the Environmental Track Record of Universities, Colleges, and Other Institutions*. Cambridge, MA: The MIT Press, 1998.

Universities can teach and demonstrate environmental principles and stewardship by taking action to understand and reduce the environmental impacts of their own activities. *Greening the Ivory Tower*, a motivational and how-to guide for staff, faculty, and students, offers detailed “greening” strategies for those who may have little experience with institutional change or with the latest environmentally friendly technologies. The author was project manager of Tufts CLEAN!, a program whose mission was to reduce Tufts University's environmental impact. After analyzing the campus's overall environmental impact (each year the main campus serves 5 million meals; makes 14 million photocopies; uses 65 tons of paper towels, 110 million gallons of water, and 23 million kWh of electricity; and generates over 2,000 tons of solid waste), the team decided to focus on food waste, transportation, energy efficiency, and procurement practices. An essential discovery was that to change practices requires the personal commitment and direct involvement of those who have the responsibility for operating the institution on a daily basis. Although the Tufts experience forms the basis for many of the proposals in the book, the story goes well beyond Tufts; the author includes examples of successful practices from many other institutions.

Cutter-Mackenzie, Amy. *Eco-Literacy: The "Missing Paradigm" in Environmental Education*. US and UK: Lambert Academic Publishing, 2009.

Dr. Cutter-Mackenzie's PhD study was aimed squarely at examining the scope and range of Australian primary school teachers' eco-literacy (their knowledge and beliefs). It was a

benchmarking study revealing the connections between what researchers, syllabus writers and key stakeholders expect teachers to know and to teach, and what teachers actually know and teach. The study employed a rigorous qualitative and quantitative research methodology, identifying that teachers are likely to be functioning at a...nominal eco-literacy. Such primary school teachers tended to dismiss the importance of knowledge, preferring to focus upon attitudes/values in the teaching of environmental education. The findings identify eco-literacy as the “missing paradigm” in environmental education and education more broadly. Such findings can be placed in wider theoretical arguments to do with knowledge and its apparent lack of focus in education over the past thirty years. In any case, such levels of eco-literacy are inadequate if eco-literate students and thus an eco-literate citizenry are to be achieved within schools.

Day, Brian A. and Martha C. Monroe, eds. *Environmental Education and Communication for a Sustainable World: Handbook for International Practitioners*. Washington, DC: Academy for Educational Development, 2000.

This handbook takes an international perspective in its presentation of various case studies that reflect theoretical and practical issues in environmental education and communication. There are 15 chapters, which are divided into 4 sections. The first section focuses on basic concepts in environmental education and communication. The second and third sections discuss ways of planning programs and conducting activities in environmental education and communication. The final section focuses on some examples that bring all of these issues together.

East, Alison. *Teaching Dance as if the World Matters: Eco-Choreography: A Design for Teaching Dance-Making in the 21st Century*. US and UK: Lambert Academic Publishing, 2011.

This book presents a rationale for ecologically based dance education. In broad terms, it is an investigation of the ways by which we may use our teaching and choreography to enhance our relations, with ourselves, each other and the world or, in other words, exploring ways whereby, “we may let the world into our [teaching] method” (Grumet 1990). An auto-ethnographic narrative is used to interweave the author’s ideas, philosophies and past experiences as a choreographer and teacher with recognized writers and thinkers from across the domains of dance, ecology, environmentalism, eco-psychology, art and aesthetics and education. From these inter-weavings the threads (principles and framework) of an eco-choreography pedagogy have been teased. The resulting study is not so much an analysis but a synthesis of many ideas woven together as three metaphorical baskets (Kete) of Knowledge. It is the author’s hope that each teacher of dance or its related arts will find within the ideas laid out, the encouragement to develop their own individualized eco-dance pedagogy.

Elder, James L. *A Field Guide to Environmental Literacy: Making Strategic Investments in Environmental Education*. Manchester, MA: Environmental Education Coalition, 2003.

This is a short book designed primarily for the sake of making connections between environmental education and sources of funding. The author show how projects in

environmental education can obtain funding at local, state, and national levels. The author also discusses the basic principles and practices of environmental education, particularly in terms of the relevance of environmental education to investment strategies.

Ernest, Julie A., Martha C. Monroe and Bora Simmons. *Evaluating Your Environmental Education Program: A Workbook for Practitioners*. Washington, DC: NAAEE, 2009.

Want to evaluate your EE program, but unsure where to begin? NAAEE has a resource to help you. *Evaluating Your Environmental Education Programs: A Workbook for Practitioners* walks you through how to design and conduct an evaluation. Throughout the workbook, 23 exercises ask you to check your understanding (the answers are included). In addition, 47 application exercises point you to tasks that will help you develop your own evaluation. A liberal use of case studies and examples illustrate the concepts in each chapter, and over 45 figures and tables provide graphic representations for visual learners. A case study of one program demonstrates how to use each chapter to conduct an evaluation.

Evans, Tina Lynn. *Occupy Education: Living and Learning Sustainability*. New York, NY: Peter Lang International Academic Publishers, 2012.

Occupy Education is motivated by the sustainability crisis and energized by the drive for social justice that inspired the Occupy movement. Situated within the struggle for sustainability taking place amid looming resource shortages, climate change, economic instability, and ecological breakdown, the book is a timely contribution to community education and action. It opens a whole realm of integrated theory to educators and sustainability activists - and demonstrates how that theory can be moved into practice. *Occupy Education* is an excellent text for courses in sustainability studies, social philosophy, globalization, social justice, food system praxis, sustainability education, political economy, and environmental studies.

Filho, Walter Leal, ed. *Innovation, Education, and Communication for Sustainable Development*. New York: Peter Lang Publishing, 2006.

This is a large collection of interdisciplinary essays that present academic and practical investigations into sustainable development. The selections in this work approach sustainable development through integrated approaches to innovation, education, and communication. This work is a contribution to the UN Decade of Education for Sustainable Development (2005-2015), and it focuses in particular on the cooperative efforts of Germany, Sweden, and the UK in a project called "SmartLIFE." Some of the themes discussed in the book include mass media, governments, non-governmental organization, educational institutions, concepts of sustainability and sustainable development, and various strategies for learning and communicating about sustainability.

-----, *Teaching Sustainability at Universities: Towards Curriculum Greening*. New York: Peter Lang Publishing, 2002.

This is a collection of essays that articulate various suggestions and strategies for designing and implementing curricula that include environmental education. The essays focus in particular on the challenges of greening universities. Topics discussed include sustainability, biodiversity, ecological restoration, environmental literacy, social and environmental justice, the Earth Charter, outdoor recreation, parks, tourism, various approaches to pedagogy, and policy development. Many of the essays focus on specific examples of environmental education from around the world, including the United States, Greece, Mexico, Latvia, the UK, Canada, and the Netherlands.

-----, *Lifelong Learning and Environmental Education*. New York: Peter Lang Publishing, 1997.

This is a collection of papers that were presented at a conference on “Environmental Education for Adults,” in which the authors discuss various countries and educational settings in which adults can learn about the environment. There are 11 papers, including discussions of workshops in lifelong learning and environmental education, UNESCO and environmental education, community-based education, storytelling, and memory. Some of the countries discussed include Poland, Slovakia, Europe, Italy, Pakistan, and Germany.

Filho, W. L., Cristina A. R. de Carvalho, and William H. G. Hale, eds. *Environmental Education in Protected Areas: International Perspectives and Experiences*. New York: Parthenon Publishing Group, 1998.

This collection of essays examines the role of environmental education in the protection of natural areas. Written from the perspectives of scientists, educators, and workers in the field, the essays in this volume present discussions of conceptual and practical issues, with chapters focusing on protected natural areas in various countries (e.g., Germany, Wales, Italy, Indonesia, Brazil, and St. Lucia).

Filho, W. L., Z. Murphy, and K. O’Loan, eds. *A Sourcebook for Environmental Education: A Practical Review Based on the Belgrade Charter*. New York and West Yorkshire: The Parthenon Group and ERTCEE, 1996.

This is a collection of writings that focus on the policies of environmental education that have been implemented in industrialized and developing countries in light of the Belgrade Charter, which emerged from the Belgrade Workshop of 1975 as part of the UNEP-UNESCO International Environmental Education Programme. The essays discuss the history of environmental education along with contemporary challenges. Some of the topics discussed include teacher training, curriculum development, policy, methods of evaluation, sustainable development, adult education, traditional environmental knowledge, university education, and numerous case studies from around the world.

Farrant, Robert and Linda Silka, eds. *Inside and Out: Universities and Education for Sustainable Development*. Amityville, NY: Baywood Publishing Company, 2006.

The essays in this volume present discussions of some ways in which universities can facilitate education for sustainable development. There is an introduction by the editors followed by ten essays. The first six essays focus on the space of the university, considering the way sustainability related to various aspects of university education, including curricula, the role of professors in teaching sustainability, the importance of humanities and social sciences for sustainability education, and the importance of interdisciplinary and campus-wide initiatives. The last four essays focus on regional and global implications of sustainability education at universities, considering the relationship between universities and the larger communities in which they are embedded.

Four Arrows (Don Trent Jacobs). *Teaching Truly: A Curriculum to Indigenize Mainstream Education*. New York, NY: Peter Lang International Academic Publishers, 2013.

For the first time in educational publishing, *Teaching Truly* offers K-16 teachers course-specific guidelines for indigenizing mainstream education. The goal is to facilitate greater educational integrity and relevance in the classroom now, without waiting for more reforms to policy, standards or curricula in general. Incorporating reality-based teaching common in traditional Indigenous learning cultures, each chapter first exposes educational hegemony, including that existing within the new common core standards, and then offers alternative, time-tested perspectives and exercises to counter and/or counter-balance such hegemony. Addressing eight common subject areas, the material can be adapted for different grade levels and can be applied to other mainstream courses.

Galea, Chris, ed. *Teaching Business Sustainability*. Sheffield, UK: Greenleaf, 2004.

This work includes two volumes, which are indicated by two different subtitles: 1) *From Theory to Practice* and 2) *Cases, Simulations, and Experiential Approaches*. Both volumes contain essays that explore various approaches to education for sustainability, particularly in terms of the challenges of sustainability education in the teaching of business. The first volume explores conceptual frameworks for working with experiential teaching methods (e.g., case studies, role-playing, and hands-on activities). The second volume provides concrete suggestions for teaching business sustainability with various case studies and experiential exercises.

Gamson Danks, Sharon. *Asphalt to Ecosystems: Design Ideas for Schoolyard Transformation*. Oakland, CA: New Village Press, 2010.

Asphalt to Ecosystems is a compelling color guidebook for designing and building natural schoolyard environments that enhance childhood learning and play experiences while providing connection with the natural world. Intended for parents, teachers, school administrators, designers, environmentalists, and community volunteers, this book is a fantastic resource that will inspire readers to transform their own school grounds. With this book, Danks broadens our notion of what a well-designed schoolyard should be, taking readers on a journey from traditional, ordinary grassy fields and asphalt, to explore the vibrant and growing movement to “green” school grounds in the United States and around the world. This book documents exciting green schoolyard examples from almost

150 schools in 11 countries, illustrating that a great many things are possible on school grounds when they are envisioned as outdoor classrooms for hands-on learning and play. The book's 500 vivid, color photographs showcase some of the world's most innovative green schoolyards including: edible gardens with fruit trees, vegetables, chickens, honey bees, and outdoor cooking facilities; wildlife habitats with prairie grasses and ponds, or forest and desert ecosystems; schoolyard watershed models, rainwater catchment systems and waste-water treatment wetlands; renewable energy systems that power landscape features, or the whole school; waste-as-a-resource projects that give new life to old materials in beautiful ways; K-12 curriculum connections for a wide range of disciplines from science and math to art and social studies; creative play opportunities that diversify school ground recreational options and encourage children to run, hop, skip, jump, balance, slide, and twirl, as well as explore the natural world first hand.

Garrard, Greg. *Teaching Ecocriticism and Green Cultural Studies*. New York, NY: Palgrave MacMillan, 2012.

Ecocriticism is one of the most vibrant fields of cultural study today, and environmental issues are controversial and topical. This volume captures the excitement of green reading, reflects on its relationship to the modern academy, and provides practical guidance for dealing with global scale, interdisciplinarity, apathy and skepticism.

Gaylie, Veronica. *Roots and Research in Urban School Gardens*. New York, NY: Peter Lang Publishing, Inc., 2011.

This book explores the urban school garden as a bridge between environmental action and thought. As a small-scale response to global issues around access to food and land, urban school gardens promote practical knowledge of farming as well as help renew cultural ideals of shared space and mutual support for the organic, built environment. Through a comprehensive history of school garden practice rooted in Eastern industrial cities, to case studies from four Pacific Rim regions; this book examines the practice and culture of the urban school garden as a central symbol for environmental learning. As poetically described by students, teachers, and community members in both historical and contemporary gardens, the story of the urban school garden inspires a new narrative in connecting learners to the land.

----- . *The Learning Garden: Ecology, Teaching, and Transformation*. New York, NY: Peter Lang Publishing, Inc., 2009.

This book tells the story of building a campus “learning garden” over a series of cohorts of student teachers and environmental education students. The project began with high ideals, no funding, and a strong desire to do something about the environment: the result was a transformation in attitude toward nature, community and toward the learning process itself. Examining the process through three key metaphors - garden as environment, garden as community, and garden as transformation - this book provides a bridge between theory and practice for ecology-centered teaching and learning.

Goleman, Daniel, Lisa Bennett and Zenobia Barlow. *Ecoliterate: How Educators Are Cultivating Emotional, Social, and Ecological Intelligence*. San Francisco, CA: Jossey-Bass, 2012.

This book shares stories of pioneering educators, students, and activists engaged in issues related to food, water, oil, and coal in communities from the mountains of Appalachia to a small village in the Arctic; the deserts of New Mexico to the coast of New Orleans; and the streets of Oakland, California to the hills of South Carolina. *Ecoliterate* marks a rich collaboration between Daniel Goleman and the Center for Ecoliteracy, an organization best known for its pioneering work with school gardens, school lunches, and integrating ecological principles and sustainability into school curricula. For nearly twenty years the Center has worked with schools and organizations in more than 400 communities across the United States and numerous other countries. *Ecoliterate* also presents five core practices of emotionally and socially engaged ecoliteracy and a professional development guide.

Goodall, Steve, ed. *Developing Environmental Education in the Curriculum*. London: David Fulton Publishers, 1994.

This is an anthology of writings on environmental education. The selections are relatively short (approximately 5 pages each), and they are grouped into five different sections. The first section is an introductory essay by the editor. The second section discusses relations between environmental education and cross-curricular themes (e.g., economics, health education, careers education, and information technology). The third section presents some practical considerations for environmental education. The fourth section focuses on environmental education in particular subjects (e.g., English, math, science, design, history, geography, art, physical education, music, and religious education). Other aspects of environmental education are presented in the final section, including accounts of environmental issues in international politics, moral and values education, finance, drama, social sciences, law, communication, and community.

Grant, Tim and Gail Littlejohn, eds. *Teaching Green: The High School Years: Hands-on Learning in Grades 9-12*. Gabriola Island, BC: New Society Publishers, 2009.

This resource is ideal for anyone working with young people in grades 9-12, whether in schools or in non-formal educational settings. Richly illustrated, it offers fifty teaching strategies that promote learning about natural systems and foster critical thinking about environmental issues, both local and global. It contains new approaches to learning, strategies for living sustainably, and numerous activities that promote interdisciplinary learning. In addition, the book provides suggestions for how best to green individual subject areas, develop integrated learning programs, or replicate exemplary programs created by innovative schools and communities.

Containing contributions from over sixty educators from across North America, the book's strength lies in its diverse content. Readers learn how best to apply systems thinking, teach about controversial issues, and use a step-by-step approach to creative problem-solving in environmental projects. Also provided are instructions for measuring the ecological footprint of a high school, creating an indoor "living system" that cleans

water, monitoring air quality with lichens, and using green technologies to help green school campuses. Many articles and activities engage teenagers in outdoor learning and community restoration projects. Suggestions are included for connecting students with special needs to the environment around them.

Readers will find accessible background information and suggestions for many practical projects and activities. It is sure to appeal to a wide range of teachers, educators, and parents seeking innovative ideas for incorporating green themes into their programs.

----- . *Teaching Green: The Elementary Years: Hands-on Learning in Grades K-5*. Portland, ME: Stenhouse Publishers, 2005.

Teaching Green, the Elementary Years is a complete “green” teaching resource. The book contains over 50 of the best teaching strategies and activities contributed to *Green Teacher* magazine over the last decade by educators across North America. All of the articles have been reviewed and updated for publication in this useful volume.

It offers a wealth of kid-tested ideas covering a wide spectrum of environmental topics from biodiversity to resource use to green technology, and helps teachers discover practical projects and new learning strategies that promote interdisciplinary, hands-on learning about natural systems and foster critical thinking about environmental issues. Supported by rich illustrations and a curriculum index, this book will be essential to educators seeking innovative ideas for exploring green themes inside and outside their classrooms.

----- . *Teaching Green: The Middle Years: Hands-On Learning in Grades 6-8*. Gabriola Island, BC: New Society Publishers, 2004.

This book presents over fifty ecologically oriented activities, exercises, strategies and other methods for educators working with young people in the “middle years” of the sixth through the eighth grade. The activities explore various issues that can be included in green teaching, including ecology, green technology, biodiversity, and the consumption of resources. Most selections begin with a brief summary for quick reference and key concepts. The book includes a helpful glossary.

----- . *Greening School Grounds: Creating Habitats for Learning*. Gabriola Island, BC: New Society Publishers, 2001.

The editors of *Green Teacher* magazine present an anthology of articles by educators and practitioners to guide teachers through all phases of a project, from winning the support of administrators to designing and creating, to exploring the multiple educational uses of school nature areas.

----- . *Teaching about Climate Change: Cool Schools Tackle Global Warming*. Gabriola Island, BC: New Society Publishers, 2001.

This exciting resource provides educators at all grade levels with strategies to teach about global warming and engage students; interest in doing their part to help cool the planet.

Compiled from the pages of North America's leading environmental education journal, *Teaching about Climate Change* is packed with lesson plans, activities, experiments, and worksheets. From calculating your school's CO2 emissions and Greenhouse experiments, to strategies for reducing school energy and supply consumption, this compendium provides the tools to get any classroom or community involved in making their school cool.

Graulich, Melody and Paul Crumbley, eds. *Search for a Common Language: Environmental Writing and Education*. Logan, UT: Utah State University Press, 2005.

This is a collection of writings by educators, scientists, and writers who explore connections between education, environmental science, and creative writing. Blending poetry, narrative, and science, these selections show how creative writings can facilitate deep engagements with the environment and thus help foster education about environmental issues. Along with the editors, there are contributions from Carolyn Tanner Irish, Ken Brewer, Robert Michael Pyle, Craig B. Stanford, Hartmut Grassl, Jennifer Price, Ted Kerasote, Louis Owens, Kent C. Ryden, Annick Smith, Dan Flores, Ellen Meloy, William Kittredge, Susan J. Tweit, and Keith Wilson.

Gruenewald, David A. and Gregory A. Smith, eds. *Place-Based Education in the Global Age: Local Diversity*. New York, NY: Routledge, 2007.

Frames place-based pedagogy as part of a broader social movement reclaiming the significance of the local, and links the development of ecological awareness and stewardship to concerns about equity and cultural diversity.

Gunter, Ellen and Ted Carter. *Earth Calling: A Climate Change Handbook for the 21st Century*. Berkeley, CA: North Atlantic Books, 2014.

Our earliest mythologies tell us we all start as a little bit of dirt. These stories carry a profound message: each of us is born with a deep and abiding connection to the earth, one that many of us have lost touch with. The *Silent Spring* for today's environmental activists, this book offers an invitation to reestablish our relationship with nature to repair our damaged environment.

Hale, Monica, ed. *Ecology in Education*. New York: Cambridge University Press, 1993.

This is a collection of 14 essays that discuss ecological (or environmental) education. The essays discuss particular cases of ecological education from throughout the world. There are essays that focus on Australia, Britain, Uganda, the United States, Indonesia, Japan, Scandinavia, and West Africa. There are also essays that discuss ways in which fieldwork and of engagements with vegetation, landscapes, and urban environments can support ecological learning.

Hart, Paul. *Teachers' Thinking in Environmental Education: Consciousness and Responsibility*. New York: Peter Lang, 2003.

This book presents an account of the beliefs, values, attitudes, thoughts, and practices with which teachers and other educational professionals view their responsibility for instructing students about the environment. The author examines teachers' accounts of the important role that the environment has in their approaches to teaching. The author discusses the importance of guiding moral principles in environmental education.

Harwell, Karen and Joanna Reynolds. *Exploring a Sense of Place: How to Create Your Own Local Program for Reconnecting with Nature*. Palo Alto, CA: Conexions, Partnerships for a Sustainable Future, 2006.

Have you ever felt the desire to be more connected to the place where you live? The *Exploring a Sense of Place* guidebook will help you with your own process of discovery and reconnection with the natural world. This book will inspire you and show you how you can begin to develop your own sense of place and share it with your children, grandchildren, friends, family, neighbors or whomever you wish. The guidebook will also give you all the practical tools you need to design, develop, organize, and produce an *Exploring a Sense of Place* program specific to your bioregion.

Hautecoeur, Jean-Paul, ed. *Ecological Education in Everyday Life: ALPHA 2000*. Toronto: University of Toronto Press, 2002.

This is a collection of essays that emerged out of a project that sought to explore possibilities for extending the benefits of ecological education beyond the boundaries of specialized institutions. This project brought together researchers from 10 countries in the Arab and Western worlds, including Canada, Egypt, Palestinian territories, Italy, Bulgaria, the Czech Republic, the United Kingdom, the United States, and Hungary. The essays discuss issues of sustainability, development, indigenous knowledge, adult education, community, and social action.

Heberlein, Thomas A. *Navigating Environmental Attitudes*. New York, NY: Oxford University Press, 2012.

The environment, and how humans affect it, is more of a concern now than ever. We are constantly told that halting climate change requires raising awareness, changing attitudes, and finally altering behaviors among the general public-and fast. New information, attitudes, and actions, it is conventionally assumed, will necessarily follow one from the other. But this approach ignores much of what is known about attitudes in general and environmental attitudes specifically-there is a huge gap between what we say and what we do. Solving environmental problems requires a scientific understanding of public attitudes. Like rocks in a swollen river, attitudes often lie beneath the surface-hard to see, and even harder to move or change. In *Navigating Environmental Attitudes*, Thomas Heberlein helps us read the water and negotiate its hidden obstacles, explaining what attitudes are, how they change and influence behavior. Rather than necessarily trying to change public attitudes, we need to design solutions and policies with them in mind. He

illustrates these points by tracing the attitudes of the well-known environmentalist Aldo Leopold, while tying social psychology to real-world behaviors throughout the book.

Heimlich, Joe E, ed. *Environmental Education: A Resource Handbook*. Bloomington, IN: Phi Delta Kappa Educational Foundation, 2002.

This is a collection of essays divided into six categories designed to provide educators with an easily accessible reference guide for implementing curricula and projects oriented toward environmental education. The six categories include 1) definitions of environmental education, 2) reflections on what is environmental about environmental education, 3) possibilities for integrating environmental and formal education, 4) environmental education beyond the study of nature, 5) some models for environmental education, and 6) other resources for environmental education. The essays draw from a collection of “EETAP Resource Library Info Sheets,” which were developed for EETAP (the Environmental Education and Training Partnership) through Ohio State University.

Helminski, Camille. *The Book of Nature: A Sourcebook of Spiritual Perspectives on Nature and the Environment*. London: The Book Foundation, 2006.

This anthology of spiritual treatments of nature and the environment presents an uplifting and universal approach to appreciating the natural order from a Muslim perspective. Each chapter is introduced with a passage from the Qur’an and followed by pieces that highlight the human role in maintaining balance in the world. Selections range from poems to short essays and cover topics such as unity, interdependence, communication, the four elements, diversity, and wonder. Including contributions from Muhammad Asad, Alain de Botton, Thomas Berry, Guy Eaton, Seyyid Hossein Nasr, and Vanda Shiva, these reminders of the power of the Divine Order allow for a deeper appreciation of the interdependence of life and nature.

Hensley, Nathan. *Curriculum Studies Gone Wild: Bioregional Education and the Scholarship of Sustainability*. New York, NY: Peter Lang International Academic Publishers, 2011.

This book explores the intersections between curriculum studies and sustainability. Recognizing that a bioregion is our “life place” and that curriculum studies is the interdisciplinary study of lived experience, this book engages in scholarship grounded in advancing ecological stewardship. By emphasizing an eco-curriculum, education can respond to the need to understand and preserve the ecological complexities that help maintain and restore biospheric wellness. This book will enable the reader to become better situated to formulate a more inspired, informed, and transformative understanding of the overlap between sustainability and education.

Hernandez, Carlos and Rashmi Mayur, eds. *Pedagogy of the Earth: Education for a Sustainable Future*. Bloomfield, CT: Kumarian Press, 2000.

This is an anthology of writings that articulate the important role of environmental education for achieving a sustainable future. There are selections from scientists,

philosophers, educators, poets, and visionaries, including Rachel Carson, David Orr, Leonardo da Vinci, Paul and Ann Ehrlich, Pablo Neruda, Herbert Marcuse, Rudyard Kipling, Ray Bradbury, Theodore Roszak, Bertrand Russell, Carolyn Merchant, and Holmes Rolston, III.

Hill, Lilian H. and Darlene E. Clover, eds. *Environmental Adult Education: Ecological Learning, Theory, and Practice for Socioenvironmental Change*. San Francisco, CA: Jossey-Bass, 2003.

This is a collection of writings that discuss environmental adult education, particularly in light of connections between environmental degradation and the ecologically destructive effects of the current global economy. This book proposes an environmental adult education for sustainability, which reconnected human problems with the problems of nature by providing new concepts and metaphors for learning and for engaging the environment while also providing suggestions for socio-environmental action and change.

Hill, Tessa. *The Everything Green Classroom Book: From Recycling to Conservation, All You Need to Create an Eco-friendly Learning Environment*. Avon, MA: Adams Media, 2009.

This book is the essential guide for teaching children about nature and environmental protection. This guide shows teachers how to incorporate “green” concepts into everyday lessons, activities, and field trips. Also included are ways to send the lesson home, with clear steps for teaching children how to make saving the earth a part of their daily lives. Features information on: 1) The best ways to address issues like global warming and the disappearing rainforests; 2) Sustainable school supplies; 3) Eco-friendly fundraising; 4) Inspiring field trip ideas (from the local farm to the local landfill) 5) Innovative ways to reduce, reuse, and recycle.

Hodgson, Chris and Matt Berry, eds. *Adventure Education: An Introduction*. New York, NY: Routledge, 2011.

Adventure Education is a form of experiential learning typically associated with activities involving risk, from cooperative games such as raft building to high adventure activities such as rock climbing. *Adventure Education: An Introduction* provides a comprehensive introduction to the planning, delivery and evaluation of Adventure Education, with a strong emphasis on professional practice and delivery.

Written by a team of leading Adventure Educators who can draw upon an extensive experience base, the book explores the most important strategies for teaching, learning and implementation in Adventure Education. The book is fully illustrated throughout with real-world case studies and research surveying the key contemporary issues facing Adventure Education practitioners. This includes essentials for the adventure educator such as risk management and tailoring activities to meet specific learning needs, as well as providing an insight into contemporary uses for adventure programs. With outdoor and adventure activities being more popular than ever before, this book is essential reading for any student, teacher or practitioner looking to understand Adventure Education and develop their professional skills.

Honovich, Nancy and Julie Beer. *National Geographic Kids Get Outside Guide: All Things Adventure, Exploration, and Fun!* Des Moines, IA: National Geographic Children's Books, 2014.

This fun-filled guide inspires kids to get out of the house and explore the great outdoors where they can discover the wonder and amazement of the world around them, whether in their backyard, across the country, or around the world. Full of fun activities, kids will learn how to make backyard bird baths, explore their local state parks, participate in an outdoor community event, and much more. Activities for every season, spring, summer, winter, and fall will be included to keep kids engaged all throughout the year. And some rainy day activities will also be presented. Fun facts, lists, and sidebars supplement activities to help put information into geographic, scientific, and/or historical context, to help kids dig deeper and learn more.

Hutchison, David. *Growing Up Green: Education for Ecological Renewal*. New York: Teachers College Press, 1998.

This book presents an account of the importance of environmental education for recovering an integral relationship with the Earth community. In particular, this book focuses on education for middle childhood. The book includes discussion of theories of child development, the role of narrative in environmental education, and various approaches to education (e.g., holistic, progressive, and traditional). There is a foreword by Thomas Berry.

Jacobson, Susan K. and Michael J. Balick, eds. *Conserving Wildlife: International Education and Communication Approaches*. New York: Columbia University Press, 1995.

This is comprehensive collection of fifteen case studies that explore approaches to the conservation of wildlife in international education and communication. The essays are grouped into five parts. The first part discusses models for education about conserving natural areas. The second part focuses on declining species, including seabirds, lions, parrots, and bats. The third part contains two essays that focus specifically on educating resource users to promote conservation. The fourth part explores models for environmental education in schools, and the fifth part presents accounts of community groups working toward conservation. The book includes examples from Malaysia, Australia, Rwanda, the United States of America, Canada, Brazil, Costa Rica, Belize, Pakistan, and the United Kingdom.

Jacobsen, Susan K., Mallory D. McDuff, and Martha C. Monroe. *Conservation Education and Outreach Techniques*. Oxford: Oxford University Press, 2006.

The authors discuss various theories and practices aimed toward the creation of education and outreach programs for conservation. A diverse assortment of techniques are suggested, including ways of improving school resources, making use of maps and other media, developing conservation partnerships, and instituting on-site projects. Numerous

case studies are taken into account through the text. This book includes photos, text boxes, and a bibliography that can help guide further explorations of education and outreach efforts in conservation.

Jardine, David. *Under the Tough Old Stars: Ecopedagogical Essays*. Resource Center for Redesigning, 2000.

This is a collection of essays that explore “ecopedagogy,” that is, the intertwining of ecology and pedagogy, both in the sense that pedagogy is always ecological and oriented toward nature and in the sense that ecology is always pedagogical as it instructs life on the conditions of its survival. The essays discuss philosophical and historical contexts for ecopedagogy while also providing concrete suggestions for classroom curricula and activities. The title of this book (*Under the Tough Old Stars*) is a line borrowed from Gary Snyder.

Johnson, Edward A. and Michael J. Mappin, eds. *Environmental Education and Advocacy: Changing Perspectives of Ecology and Education*. New York: Cambridge University Press, 2005.

This is a collection of thirteen essays that present account of the relationship between ecology and education in the field of environmental education. The writings provide critical perspective on environmental education while also providing suggestions for ways that ecologists can become more engaged with all levels of education. The essays are divided into four parts. The first part focuses on changing perspectives on ecology, including perspectives from scientists, philosophers, government agencies, NGOs, schools, and educators. The second part focuses on how these perspectives are changing with regard to education. The third part proposes some ways of assessing these perspectives of ecology and education. The final part focuses on possibilities for an integration of perspectives of ecology, education, and action.

Johnson, J. Angelique. *The Eco-Student's Guide to Being Green at School*. North Mankato, MN: Picture Window Books, 2010.

Are you an eco-student? Check out each room of this school for what to do and what to change. From backpacks to textbooks, learn green tips to get your friends and teachers on the eco-friendly track.

Johnston, Lucas F. *Higher Education for Sustainability: Cases, Challenges, and Opportunities from Across the Curriculum*. New York, NY: Routledge, 2012.

Student and employer demand, high-level institutional commitment, and faculty interest are inspiring the integration of sustainability oriented themes into higher education curricula and research agendas. Moving toward sustainability calls for shifts in practice such as interdisciplinary collaboration and partnerships for engaged learning. This timely edited collection provides a glimpse at the ways colleges and universities have integrated sustainability across the curriculum. The research-based chapters provide empirical

studies of both traditional and innovative degree programs as well as case studies from professional schools. Chapter authors illustrate some of the inclusive and deliberative community and political processes that can lead to sustainable learning outcomes in higher education. Exploring the range of approaches campuses are making to successfully integrate sustainability into the curricula, this much-needed resource provides inspiration, guidance, and instruction for others seeking to take education for sustainability to the next level.

Jones, Paula, David Selby, and Stephen Sterling, eds. *Sustainability Education: Perspectives and Practice across Higher Education*. New York, NY: Earthscan, 2010.

How do we equip learners with the values, knowledge, skills, and motivation to help achieve economic, social and ecological well-being? How can universities make a major contribution towards a more sustainable future? Amid rising expectations on HE from professional associations, funders, policy makers, and undergraduates, and increasing interest amongst academics and senior management, a growing number of higher education institutions are taking the lead in embracing sustainability. This response does not only include greening the campus but also transforming curricula and teaching and learning. This book explains why this is necessary and – crucially – how to do it. Bringing together the experience of the HEFCE funded Centre for Sustainable Futures (CSF) at the University of Plymouth and the Higher Education Academy's Education for Sustainable Development Project, the book distills out the curriculum contributions of a wide range of disciplinary areas to sustainability. The first part of the book provides background on the current status of sustainability within higher education, including chapters discussing interdisciplinarity, international perspectives and pedagogy. The second part features 13 chapter case studies from teachers and lecturers in diverse disciplines, describing what has worked, how and why - and what hasn't. Whilst the book is organized by traditional disciplines, the authors and editors emphasize transferable lessons and interdisciplinarity so that readers can learn from examples outside their own area to embed sustainability within their own curricula and teaching. Subject areas covered include: geography, environmental and Earth Sciences, nursing/health, law, dance, drama, music, engineering, media and cultural studies, art and design, theology, social work, economics, languages, education, business and built environment.

Jucker, Rolf. *Our Common Illiteracy: Education as if the Earth and People Mattered*. Frankfurt am Main: Peter Lang, 2002.

In this book, the author discusses the implications of Education for Sustainability (EfS). The author discusses the principles of sustainability, criticizes current unsustainable practices that pervade society, and proposes a transdisciplinary conceptual framework for realizing a sustainable future. The book concludes with a series of practical suggestions for reforming the current educational system and instituting curricula and practices for EfS.

Judson, Gillian. *A New Approach to Ecological Education: Engaging Students' Imaginations in Their World*. New York, NY: Peter Lang International Academic Publishers, 2010.

Ecological education is becoming a major area of interest worldwide, and schools are increasingly being called upon to address global and local ecological concerns. Unfortunately, most teachers have limited or no training in the knowledge and skills required to support their students' sense of connection to the natural world. Moreover, they have been trained to teach in ways that often marginalize the imagination in learning. This book illustrates how imagination and the development of ecological understanding are closely connected. It offers teachers a practical guide to teaching in ecological and imaginative ways - needed support to establishing more ecologically-oriented education in all classrooms. As imagination takes a central position in schools, all teaching and learning can improve as a result.

Kahn, Peter and Patricia Hasbach, eds. *The Rediscovery of the Wild*. Cambridge, MA: The MIT Press, 2013.

We often enjoy the benefits of connecting with nearby, domesticated nature – a city park, a backyard garden. But this book makes the provocative case for the necessity of connecting with wild nature – untamed, unmanaged, not encompassed, self-organizing, and unencumbered and unmediated by technological artifice. We can love the wild. We can fear it. We are strengthened and nurtured by it. As a species, we came of age in a natural world far wilder than today's, and much of the need for wildness still exists within us, body and mind. *The Rediscovery of the Wild* considers ways to engage with the wild, protect it, and recover it – for our psychological and physical well-being and to flourish as a species. The contributors offer a range of perspectives on the wild, discussing such topics as the evolutionary underpinnings of our need for the wild; the wild within, including the primal passions of sexuality and aggression; birding as a portal to wildness; children's fascination with wild animals; wildness and psychological healing; the shifting baseline of what we consider wild; and the true work of conservation.

Kahn, Peter and Stephen Kellert, eds. *Children and Nature: Psychological, Sociocultural, and Evolutionary Investigations*. Cambridge, MA: The MIT Press, 2002.

For much of human evolution, the natural world was one of the most important contexts of children's maturation. Indeed, the experience of nature was, and still may be, a critical component of human physical, emotional, intellectual, and even moral development. Yet scientific knowledge of the significance of nature during the different stages of childhood is sparse. This book provides scientific investigations and thought-provoking essays on children and nature. *Children and Nature* incorporates research from cognitive science, developmental psychology, ecology, education, environmental studies, evolutionary psychology, political science, primatology, psychiatry, and social psychology. The authors examine the evolutionary significance of nature during childhood; the formation of children's conceptions, values, and sympathies toward the natural world; how contact with nature affects children's physical and mental development; and the educational and political consequences of the weakened childhood experience of nature in modern society.

Kahn, Peter and Lorriane Walsh. *Developing Your Teaching: Ideas, Insight and Action (Key Guides for Effective Teaching in Higher Education)*. New York, NY: Routledge, 2006.

For new as well as more experienced lecturers, this motivational book is packed with accessible and practical advice, grounded in learning theory. The authors show how to take a step back, reflect on your current practice and take measures to improve it. A wide range of creative and innovative ideas are explored including: using feedback from peers and students; turning your understanding into practice; getting involved in support networks; working with mentors; using teaching to progress your career.

Kahn, Richard. *Critical Pedagogy, Ecopedagogy, and Planetary Crisis: The Ecopedagogy Movement*. New York, NY: Peter Lang International Academic Publishers, 2010.

We live in a time of unprecedented planetary ecocrisis, one that poses the serious and ongoing threat of mass extinction. What role can critical pedagogy play in the face of such burgeoning catastrophe? Drawing upon a range of theoretical influences - including Paulo Freire, Ivan Illich, Herbert Marcuse, traditional ecological knowledge, and the cognitive praxis produced by today's grassroots activists in the alter-globalization, animal and earth liberation, and other radical social movements - this book offers the foundations of a philosophy of ecopedagogy for the global north. In so doing, it poses challenges to today's dominant ecoliteracy paradigms and programs, such as education for sustainable development, while theorizing the needed reconstruction of critical pedagogy itself in light of our presently disastrous ecological conditions. Students and teachers of critical pedagogy at all levels, as well as those involved in environmental studies and various forms of sustainability education, will find this book a powerful provocation to adjust their thinking and practice to better align with those who seek to abolish forms of culture predicated upon planetary extermination and the domination of nature.

Kaye, Cathryn Berger. *A Kids' Guide to Climate Change & Global Warming: How to Take Action!* Minneapolis, MN: Free Spirit Publishing, 2009.

Carbon footprints, alternative energies, deforestation, and water conservation are just some of the issues related to climate change and global warming addressed in this book. Kids explore what others in the world have done and are doing to address the problem, find out what their own community needs, and develop a service project. This book includes facts, quotations, real-life examples, write-on pages, resources, a note to adults—and a lot of inspiration to get out there and make a difference.

Kirkland, Jane. *No Student Left Indoors: Creating a Field Guide to Your Schoolyard (Take a Walk)*. Chicago, IL: Stillwater Publishing, 2011.

The essential educator's guide to helping students discover, observe, and record nature in their schoolyard—urban, suburban, or rural—this book outlines a class, grade, or school-wide project connecting history, language arts, art, and technology. This is a complete source for place, project, and standards-based nature studies conducted under current

conditions of any schoolyard, with no need for a special outdoor classroom. Included are case studies, stories, instructions, and resources for getting kids into the outdoors.

Koger, Susan M. and Deborah DuNann Winter. *The Psychology of Environmental Problems: Psychology for Sustainability*. New York, NY: Taylor & Francis, 2010.

This compelling and insightful textbook demonstrates how eight major approaches in psychology – social, psychoanalytical, behavioral, cognitive, physiological, health, developmental, and holistic – can be applied to create a more sustainable society. After outlining current environmental difficulties and historical antecedents, these various perspectives offer guidance for changing individual and collective behavior. This 3rd edition is thoroughly revised and updated throughout, and features new chapters on the neuropsychology of toxic exposures, health and the psychology of environmental stress, and developmental psychology. It offers a comprehensive review of literature in various subdisciplines, demonstrating the wide applicability and relevance of psychology for addressing imminent environmental threats. Like both previous editions, the book's tone is widely accessible and engaging – and no previous background in psychology or environmental science is assumed or required. The use of personal examples and cartoons help engage the reader. The 3rd edition is also accompanied by online resources for instructors. *The Psychology of Environmental Problems: Psychology for Sustainability, 3rd Edition* can be used as a primary or secondary textbook on a wide range of courses in Ecological Psychology, Environmental Science, Sustainability Sciences, Environmental Education, and Social Marketing. It also provides a valuable resource for professional audience of policymakers, legislators, and those working on sustainable communities.

Kohlstedt, Sally Gregory. *Teaching Children Science: Hands-On Nature Study in North America, 1890-1930*. Chicago, IL: The University of Chicago Press, 2010.

In the early twentieth century, a curriculum known as nature study flourished in major city school systems, streetcar suburbs, small towns, and even rural one-room schools. This object-based approach to learning about the natural world marked the first systematic attempt to introduce science into elementary education, and it came at a time when institutions such as zoos, botanical gardens, natural history museums, and national parks were promoting the idea that direct knowledge of nature would benefit an increasingly urban and industrial nation.

The definitive history of this once pervasive nature study movement, *Teaching Children Science* emphasizes the scientific, pedagogical, and social incentives that encouraged primarily women teachers to explore nature in and beyond their classrooms. Sally Gregory Kohlstedt brings to vivid life the instructors and reformers who advanced nature study through on-campus schools, summer programs, textbooks, and public speaking. Within a generation, this highly successful hands-on approach migrated beyond public schools into summer camps, afterschool activities, and the scouting movement. Although the rich diversity of nature study classes eventually lost ground to increasingly standardized curricula, Kohlstedt locates its legacy in the living plants and animals in classrooms and environmental field trips that remain central parts of science education today.

Krasney, Marianne E. and Justin Dillon, eds. *Trading Zones in Environmental Education: Creating Transdisciplinary Dialogue*. New York, NY: Peter Lang International Academic Publishers, 2013.

Environmental educators often adhere to a relatively narrow theoretical paradigm focusing on changing attitudes and knowledge, which are assumed to foster pro-environmental behaviors, which in turn, lead to better environmental quality. This book takes a different approach to trying to understand how environmental education might influence people, their communities, and the environment. The authors view changing environmental behaviors as a “wicked” problem, that is, a problem that does not readily lend itself to solutions using existing disciplinary approaches. The book as a whole opens up new avenues for pursuing environmental education research and practice and thus expands the conversation around environmental education, behaviors, and quality. Through developing transdisciplinary research questions and conceptual paradigms, this book also suggests new practices beyond those currently used in environmental education, natural resources management, and other environmental fields.

Kulnieks, Andrejs, Dan Roronhiakewen Longboat and Kelly Young, eds. *Contemporary Studies in Environmental and Indigenous Pedagogies: A Curricula of Stories and Place*. The Netherlands: Sense Publishing, 2013.

Our book is a compilation of the work of experienced educational researchers and practitioners, all of whom currently work in educational settings across North America. Contributors bring to this discussion, an enriched view of diverse ecological perspectives regarding when and how contemporary environmental and Indigenous curriculum figures into the experiences of curricular theories and practices. This work brings together theorists that inform a cultural ecological analysis of the environmental crisis by exploring the ways in which language informs ways of knowing and being as they outline how metaphor plays a major role in human relationships with natural and reconstructed environments. This book will be of interest to educational researchers and practitioners who will find the text important for envisioning education as an endeavor that situates learning in relation to and informed by an Indigenous Environmental Studies and Eco-justice Education frameworks. This integrated collection of theory and practice of environmental and Indigenous education is an essential tool for researchers, graduate and undergraduate students in faculties of education, environmental studies, social studies, multicultural education, curriculum theory and methods, global and comparative education, and women's studies. Moreover, this work documents methods of developing ways of implementing Indigenous and Environmental Studies in classrooms and local communities through a framework that espouses an eco-ethical consciousness.

Kyburz-Graber, Regula, Paul Hart, Peter Posch, and Ian Robottom, eds. *Reflective Practice in Teacher Education: Learning from Case Studies of Environmental Education*. New York: Peter Lang Publishing, 2006.

This is a collection of essays of case studies involving five European countries (Italy, Austria, Hungary, Sweden, and Switzerland). The essays address the challenges for environmental education in schools and in institutions of teacher education. Case studies are followed by cross-case comparisons that discuss theoretical and practical issues raised in the case studies, including educational policy, institutions, methodology, nature experience, relationships between disciplines and traditional knowledge, the contributions of action research to education, and critiques of current systems of education.

Leal Filho, Walter, ed. *Sustainable Development at Universities: New Horizons*. New York, NY: Peter Lang International Academic Publishers, 2012.

This book, prepared in the context of the *UN Conference on Sustainable Development (UNCSD)*, also known as *Rio+20*, contains the papers submitted to the *World Symposium on Sustainable Development at Universities (WSSD-U-2012)*, which took place in Rio de Janeiro, Brazil on June 5 and 6, 2012. It pursues the following main aims: to document and disseminate experiences from universities all round the world regarding education for sustainable development; to foster the exchange of information, ideas and experiences acquired in the execution of projects; and to introduce methodological approaches and projects which aim to integrate the topic of sustainable development in the curriculum of universities. Last but not least, a further aim is to document and disseminate the wealth of experiences available today, providing a truly global coverage. *Sustainable Development at Universities: New Horizons* is a highly comprehensive publication on sustainability in higher education. It is meant to go beyond a description of the current state of knowledge, and shall open the way for new thinking and new horizons in what is a rapidly expanding field, of central interest to both industrialized and developing countries.

----- . *World Trends in Education for Sustainable Development*. New York, NY: Peter Lang International Academic Publishers, 2011.

It is widely acknowledged that sustainable development is a long-term goal, which both individuals and institutions (and countries) need to pursue. This important theme is characterized by an intrinsic complexity, since it encompasses ecological or environmental considerations on the one hand, and economic matters, social influences and political frameworks on the other. This makes provisions in respect of education for sustainable development a particularly challenging task, but one which is feasible and achievable, provided the right elements are put into place. This book is an attempt to foster the cause of education for sustainable development, by documenting and disseminating experiences from different parts of the world, where learning for, about and through the principles of sustainability is taking place, in various sets and contexts, in both industrialized and developing nations. A special feature of this book is that it not only presents a wide range of philosophies, approaches, methods and analyses with respect to education for sustainable development across the world, but also documents and disseminates concrete case studies, which show how education for sustainable development may be realized in practice.

------. *Universities and Climate Change: Introducing Climate Change to University Programs*. New York, NY: Springer, 2010.

Climate change is a matter of global concern and specific sectors of society such as universities need to engage and be active in the search for regional and local solutions for what is a global problem. Despite the fact that many universities all around the world are undertaking remarkable efforts in tackling the challenges posed by climate change, few of such works are widely documented and disseminated. The book *Universities and Climate Change* addresses this gap. The book pursues three aims. Firstly, it presents a review of the approaches and methods to inform, communicate, and educate university students and the public on climate change being used by universities around the world. Secondly, it introduces initiatives, projects and communication strategies undertaken by universities with a view to informing students and other stakeholders in order to raise awareness on matters related to climate change. Finally, the book documents, promotes, and disseminates some of the on-going initiatives.

------. *Sustainability at Universities - Opportunities, Challenges and Trends*. New York, NY: Peter Lang International Academic Publishers, 2009.

Sustainability is widely defined as “the ability to meet the needs of the present while living within the carrying capacity of supporting ecosystems and without compromising the ability of future generations to meet their own needs.” However, the goal of managing today’s resources so that they may be available to future generations is not easy to reach. Indeed, in order to achieve this ambitious goal, it is important that universities - similar to other sectors of society - become engaged in the sustainability debate, not superficially as it has largely been the case until now, but in a manner not seen before. This book provides a concrete contribution towards the goal of fostering sustainability at universities, by especially focusing on opportunities, challenges and trends. It contains a wide range of papers written by university lecturers, professors, students and practitioners, as well as practical projects, which illustrate some of the latest trends and future perspectives related to sustainability in higher education. It was prepared as part of the project JELARE (Joint European-Latin American Universities Renewable Energy Project), funded by ALFA III, an EU program of co-operation between the European Union and Latin America, in the framework of higher education and training. This book is meant to inform, inspire and engage all members of the University community in the wide debate on how the principles of sustainable development may be implemented into practice. Produced mid-way in the UN Decade of Education for Sustainable Development, led by UNESCO, it serves the purpose of documenting and disseminating current initiatives all round the world, also paving the way for new ones.

------. *Environmental Careers, Environmental Employment and Environmental Training: International Approaches and Contexts*. New York, NY: Peter Lang International Academic Publishers, 2001.

This book presents an overview of experiences, projects and approaches related to employment in the environment sector and of trends related to sustainability. It also

contains an article on career prospects for women in the field of engineering, of which environmental engineering is an important component. This publication, prepared as part of the project “Careers in Engineering” funded by the EU’s LEONARDO Program, documents a variety of experiences on environmental training useful to those involved with curriculum development, curriculum planning and other aspects of environmental education.

-----, *Sustainability and University Life*. New York, NY: Peter Lang International Academic Publishers, 2000.

Prepared in cooperation with the Association of University Leaders for a Sustainable Future (ULSF), this book presents a number of case studies and experiences which illustrate how higher education institutions (e. g. universities and colleges) may pursue sustainability. A wide range of views and perspectives illustrate how, via projects, networks, academic programmes, curriculum greening initiatives and student involvement, higher education institutions in various countries (for example the United States, United Kingdom, The Netherlands, Switzerland, Germany, France) are trying to bring sustainability closer to their institutional lives.

Leal Filho, Walter and Franziska Mannke, eds. *Interdisciplinary Aspects of Climate Change*. New York, NY: Peter Lang International Academic Publishers, 2009.

Climate change is a matter of great interest and worldwide concern. The latest evidences from scientific studies and official documents produced by the International Panel on Climate Change (IPCC) show that the challenges posed by climate change need to be taken seriously if they are ever to be tackled properly. It is widely acknowledged that information, communication and education on climate change are important tools in the search for solutions to the social, economic or political problems climate changes poses. But despite the fact that much has been written about climate change, most works to date tend to focus on specific issues (e.g. climate modeling, forecasts) as opposed to addressing the problem in an interdisciplinary way as it should be. This book tries to address this perceived gap by providing a wide range of perspectives on climate change, which goes over and above the traditional barriers seen among subjects. It is interdisciplinary in nature and comprehensive in scope. This book was prepared in the context of “Climate 2008” (www.klima2008.net), the world’s first scientific conference on climate change held on the internet, and is one of the first outputs of the newly-created “International Climate Change Information Program” (ICCIP). It provides a long-needed contribution to a better understanding of the interdisciplinary nature of the subject matter of climate change and offers an overview of some of the on-going interdisciplinary projects and initiatives in this field taking place in different parts of the world.

Leal Filho, Walter and Mario Salomone, eds. *Innovative Approaches to Education for Sustainable Development*. New York, NY: Peter Lang International Academic Publishers, 2006.

The present book is a compilation of some of the key note speeches and papers delivered at the Third World Environmental Education Congress - 3rd WEEC (Turin, Italy,

October 3-6, 2005). It includes a number of the contributions in various subjects discussed at the Congress, whose lead theme was “Educational paths towards Sustainability.” This book documents the wide range of topics in the field of environmental education discussed at the event, with a special emphasis to the scientific, educational and participatory aspects presented at the Congress and considers how they are linked with sustainable development. The Third World Environmental Education Congress was a further, positive step forward towards the cause of promoting environmental education across the world. The experiences gathered and documented in this book, which is a concrete contribution towards the UN Decade of Education for Sustainable Development, want to raise further interest and catalyze further projects and initiatives all over the world.

Leou, Mary J. *Readings in Environmental Education: An Urban Model*. Dubuque, IA: Kendall Hunt, 2005.

This is a small collection of readings that propose suggestions for an urban model of environmental education. The nine essays discuss the importance of interdisciplinary contexts, student inquiry, science, museums, and non-formal contexts (including outdoor experiences) for environmental education.

Leslie, Clare Walker. *The Nature Connection: An Outdoor Workbook for Kids, Families, and Classrooms*. North Adams, MA: Storey Publishing, 2010.

Ever since Richard Louv diagnosed nature-deficit disorder in his classic book *Last Child in the Woods*, parents and teachers have been looking for more ways to connect children with the outdoors. Nationally recognized naturalist and artist Clare Walker Leslie has been igniting kids’ curiosity about nature for more than 30 years. Her unique approach combines directed observational activities with journaling and field-note prompts that are designed to nurture the next generation of nature lovers and environmentalists. *The Nature Connection* is an interactive workbook chockfull of creative exercises for kids ages 8 to 13. Leslie begins simply by encouraging children to look out the window and record what they observe: What color is the sky? What shapes are the clouds? Are there any birds? What kind? Are there signs of what season it is?

Leslie, Clare Walker, John Tallmadge, and Tom Wessels. *Into the Field: A Guide to Locally Focused Teaching*. Great Barrington, MA: Orion Society, 2005.

This is a short collection of essays that discuss different approaches to teaching about their local natural and cultural history. The essays discuss theoretical issues of pedagogy while also discussing practical suggestions for engaging students in their local history. Contributions include the following: “Introduction: To Learn from Wood and Stone” by Ann Zwinger; “Writing as a Window into Nature” by John Tallmadge; “Teaching Nature Journaling and Observation” by Clare Walker Leslie; “Reading the Landscape’s History” by Tom Wessels.

Lieberman, Gerald A. *Education and the Environment: Creating Standards-Based Programs in Schools and Districts*. Cambridge, MA: Harvard Education Press, 2013.

In this timely book, curriculum expert Gerald A. Lieberman provides an innovative guide to creating and implementing a new type of environmental education that combines standards-based lessons on English language arts, math, history, and science with community investigations and service learning projects. By connecting academic content with local investigations, environmental study becomes not simply another thing added to the classroom schedule but an engaging, thought-provoking context for learning multiple subjects. The projects outlined in the book further students' understanding of the way human and natural systems interact locally and globally, and provide the next generation with the knowledge necessary for making decisions that will be critical to their future—and ours.

Life Lab Science Program. *Getting Started: A Guide for Creating School Gardens as Outdoor Classrooms*. Berkeley, CA: Center for Ecoliteracy, 2007. Downloadable version: <http://www.ecoliteracy.org/downloads/getting-started>

Getting Started is a 51-page guide designed and published by the Center for Ecoliteracy in collaboration with Life Lab Science Program, a national leader in garden-based education. Among the topics in this book: Nurturing a child's curiosity; Connecting the garden to the classroom; Selecting and preparing a garden site; Understanding nature's cycles; Identifying the responsibilities of the garden coordinator; Involving the community.

Lin, Jing and Rebecca Oxford, eds. *Transformative Eco-Education for Human and Planetary Survival*. Charlotte, NC: Information Age Publishing, 2011.

A volume in Transforming Education for the Future Series Editors Jing Lin, University of Maryland and Rebecca Oxford, Air University Transformative eco-education is environmental education that is needed to transform and save our planet, especially during the global ecological crises of our present century. Such education demands inner transformation of many deeply rooted ideas, such as the following: the Earth exists merely to provide for human comfort; the extinction or reduction of other species does not matter; we are free to consume or destroy natural resources at will but are safe from destruction ourselves; and the Earth will continue to sustain us, even if we do not sustain the Earth. Unless these concepts are changed, we will increase global warming and add to the ruin of much of the Earth. This book presents powerful ideas for transformative eco-education. At this time of ever-increasing ecological crisis, such education is needed more than ever before. We urge readers to use the ideas and activities in this book with your students, develop them further, and create new conceptions to share with other educators and students. The chapters in this book provide key principles, of which the following are just a few. First, educators can and should prepare students for natural disasters. Second, stories, case studies, the arts, and hands-on environmental experience, all enriched by reflection and discussion, can offer profound learning about ecology.

Third, education at all levels can benefit from a true ecological emphasis. Fourth, teachers must receive preparation in how to employ transformative eco-education. Fifth, Indigenous wisdom can offer important, holistic, spiritual paths to understanding and caring for nature, and other spiritual traditions also provide valid ways of comprehending humans as part of the universal web of existence. Sixth, transformative eco-education can be an antidote to not only to environmental breakdown, but also to materialistic overconsumption and moral confusion. Seventh, we can only heal the Earth by also healing ourselves. If we heed these principles, together we can make transformative eco-education a blazing torch to light the path for the current century and beyond.

Louv, Richard. *The Nature Principle: Reconnecting with Life in a Virtual Age*. Chapel Hill, NC: Algonquin Books, 2012.

For many of us, thinking about the future conjures up images of Cormac McCarthy's *The Road*: a post-apocalyptic dystopia stripped of nature. Richard Louv, author of the landmark bestseller *Last Child in the Woods*, urges us to change our vision of the future, suggesting that if we reconceive environmentalism and sustainability, they will evolve into a larger movement that will touch every part of society. This New Nature Movement taps into the restorative powers of the natural world to boost mental acuity and creativity; promote health and wellness; build smarter and more sustainable businesses, communities, and economies; and ultimately strengthen human bonds. Supported by groundbreaking research, anecdotal evidence, and compelling personal stories, Louv offers renewed optimism while challenging us to rethink the way we live.

------. *The Web of Life: Weaving the Values That Sustain Us*. Berkeley, CA: Conari Press, 2008.

With great warmth and wisdom, *The Web of Life* sends a passionate call for rebuilding community and family life. Award-winning journalist Richard Louv explores the fragile network that connects people and the strands that make it up: nature, childhood, adulthood, spirit, purpose, and community. Richard Louv makes a compelling case that our future depends on rebuilding this fragile web of life through strengthening and treasuring our friendships, our business relationships, and our families.

------. *Last Child in the Woods: Saving our Children from Nature-Deficit Disorder*. Chapel Hill, NC: Algonquin Books, 2005.

In this work, Louv discusses the increasing problems of nature-deficit disorder, which is a disorder that is inflicting increasing numbers of children who have not spent much time engaging in the natural environment. Louv provides a readable narrative that articulates the shortcomings of current attitudes and practices that foster alienation and separation between children and nature, and he suggests that creative play in the outdoors is an integral part of child development. Louv discusses the importance of outdoor activities (e.g., hiking, fishing, playing, etc.) for facilitating a reunion of children with nature. One chapter focuses exclusively on the issues of education and school reform.

Martin, James and James E. Samels. *The Sustainable University: Green Goals and New Challenges for Higher Education Leaders*. Baltimore, MD: Johns Hopkins University Press, 2012.

Colleges and universities are at the forefront of efforts to preserve the earth's resources for future generations. Carbon neutrality, renewable energy sources, green building strategies, and related initiatives require informed and courageous leaders at all levels of higher education. James Martin and James E. Samels have worked closely with college and university presidents, provosts, and trustees to devise best practices that establish sustainable policies and programs in the major areas of institutional operations. While almost seven hundred chief executive officers have signed the American College and University Presidents' Climate Commitment, several thousand have yet to do so. This book identifies four of the most formidable challenges facing these presidents and leadership teams along with solutions to address them: effectively institutionalizing sustainability thinking; developing an efficient, flexible system of sustainability benchmarks; implementing an accountable university budget model; and engaging boards of trustees in the campus sustainability agenda. The volume's contributors, including recognized authorities on sustainability as well as campus executives with broad-ranging experience, consider these challenges and discuss specific action plans, best practices, and emerging trends in sustainability efforts. They offer sustainability solutions for almost every major operational area of campus and consider what sustainability means for colleges and universities—and the legacy of those entrusted with shaping their future.

Martusewicz, Rebecca, Jeff Edmundson, and John Lupinacci. *EcoJustice Education: Toward Diverse, Democratic, and Sustainable Communities*. New York, NY: Routledge, 2011.

Designed for introductory social foundations or multicultural education courses, this text offers a powerful model for cultural ecological analysis and pedagogy of responsibility, providing teachers and teacher educators with the information and classroom practices they need to help develop citizens who are prepared to support and achieve diverse, democratic, and sustainable societies in an increasingly globalized world.

McKenzie, Marcia, Paul Hart, Heesoon Bai and Bob Jickling, eds. *Fields of Green: Restorying Culture, Environment and Education*. New York, NY: Hampton Press, Inc., 2009.

This book is about hopeful daydreams and their implications for action in the interwoven spheres of culture, environment, and education. In spite and because of the recent significant shift in concern for the environment around the globe, there remains the urgent task of restorying the ways we live on this earth. This collection works across various fields of green, drawing together poetry, philosophy, journalism, sociology, curriculum studies, Indigenous scholarship, feminist and social justice work, environmental ethics, and a range of other fields of inquiry and practice. Individually and cumulatively, the contributors search for, theorize, and practice approaches that probe education as an endeavor that imperfectly, yet hopefully, walk the blurred line between cultural determinism and resistance. This is a delicious volume that joins daydreams and nightmares; composting liberatory education and interrogating environmental crises;

where theory and affect snuggle; poetry and critical theory embrace; where flowers grow among trauma. In this volume the notion of a field grows rich, colorful, and generative; refusing to be disciplined, constrained, and bounded.

McKibben, Bill. *Oil and Honey: The Education of an Unlikely Activist*. New York, NY: Times Books, 2014.

Bestselling author and environmental activist Bill McKibben recounts the personal and global story of the fight to build and preserve a sustainable planet. Bill McKibben is not a person you'd expect to find handcuffed and behind bars, but that's where he found himself in the summer of 2011 after leading the largest civil disobedience in thirty years, protesting the Keystone XL pipeline in front of the White House. With the Arctic melting, the Midwest in drought, and Irene scouring the Atlantic, McKibben recognized that action was needed if solutions were to be found. Some of those would come at the local level, where McKibben joins forces with a Vermont beekeeper raising his hives as part of the growing trend toward local food. Other solutions would come from a much larger fight against the fossil-fuel industry as a whole. *Oil and Honey* is McKibben's account of these two necessary and mutually reinforcing sides of the global climate fight—from the center of the maelstrom and from the growing hive of small-scale local answers. With empathy and passion he makes the case for a renewed commitment on both levels, telling the story of raising one year's honey crop and building a social movement that's still cresting.

M'Gonigle, Michael and Justine Starke. *Planet U: Sustaining the World, Reinventing the University*. New Society Publishers, 2006.

This book calls for a new socially engaged university, which is able to respond to the current environmental crisis and foster sustainability. The authors discuss the history of the university and provide critical remarks about its problems the university has in facing current economic, social, and ecological challenges. The authors consider how a reinvention of the university can make it possible the university to lead social movements that not only work within the university but also within the city and larger communities of which the university is part. If it responds to the challenges of sustaining the world, the university can provide innovations in energy use, transportation, social practices, and political movements.

Miller, Ron, ed. *Renewal of Meaning in Education: Responses to the Cultural and Ecological Crisis of Our Times*. Brandon, VT: Holistic Education Press, 1993.

This is a collection of essays that challenge teachers and other educational professionals to respond to the current ecological and cultural crisis. The essays discuss a variety of issues related to environmental education, including philosophical implications of holistic thinking, educational implications of the environmental crisis, the relationship between critical theory and various holistic and spiritual teachings, Rudolf Steiner's epistemology and the Waldorf approach to education, and other theories of teaching and learning.

There are contributions from the following: Douglas Sloan, C. A. Bowers, David Orr, David Purpel, Kathleen Kesson, John P. Miller, Jeffrey Kane, and Lois Bridges Bird.

Millington, Janet and Carolyn Nuttal. *Outdoor Classrooms: A Handbook for School Gardens, 2nd Edition*. White River Junction, VT: Chelsea Green Publishing Co., 2013.

Outdoor Classrooms: A Handbook for School Gardens is ideal for teachers and home educators who want to incorporate education at all levels of the school curriculum with an emphasis on: setting up edible gardens; teaching children about growing food; food security and economics; human and planetary health; permaculture and sustainability. Beautifully illustrated throughout, *Outdoor Classrooms* is presented as two streams of thought: Carolyn takes us through the history of school gardens and articulates the need for a revival before leading us on an enticing journey of the imagination into the schoolyard and delight in the natural world.

Monroe, Martha C. *What Works: A Guide to Environmental Education and Communication Projects for Practitioners and Donors*. Gabriola Island, BC: New Society Publishers, 1999.

Environmental education and communication projects are used in schools, communities, parks and wildlife preserves. This lively manual illustrates some of the most successful environmental education and communication projects from around the world and provides program ideas for professionals as well as those involved part-time in environmental education.

Over forty unique projects - from a puppet show in Guatemala that explains the consequences of deforestation, to an air-pollution monitoring program with youth in Brazil - highlight the strategies that have worked for environmental educators, program directors, and their financial supporters.

Murray, Paul. *The Sustainable Self: A Personal Approach to Sustainability Education*. New York, NY: Routledge, 2011.

Achieving a sustainable society is the biggest issue of our time. It is not an issue confined to a particular subject area or to certain jobs. It is a way of thinking and behaving that will need to be embedded in all aspects of all of our lives. *The Sustainable Self* is the perfect resource for lecturers, trainers, students and professionals of any discipline who need to teach or learn about sustainability. There is widespread agreement that we need to live more sustainable lives. But when up against entrenched habits and everyday obstacles, it can be difficult to turn good intentions into action. This book presents a complete curriculum for effecting a personal transformation towards sustainability, showing you how to align your personal and professional actions with your values and beliefs. Full of activities that can be done individually or in groups, it is supported by additional resources online including downloadable worksheets and directories of sustainability organizations. Recommended readings at the end of each chapter enable readers to pursue areas of personal or professional interest.

Muthoka, Margaret G, A. B. Rego, and Z. K. Rimbui. *Environmental Education: Essential Knowledge for Sustainable Development*. Kampala, Uganda and Nairobi: Longhorn Publishers, 1998.

This interdisciplinary work explores the implications of global environmental issues for education, specifically with respect to Africa. Each chapter contains questions and projects for further study. Some of the issues of environmental education discussed in this text include basic principles and pedagogies of environmental education, the relationship between population and the environment, food and agriculture, environmental health, energy, natural resources, the built environment, natural hazards, pollution, and environmental management.

National Geographic Learning. *Environment: Our Impact on the Earth*. Boston, MA: Cengage Learning, 2013.

This book is part of a ground-breaking new National Geographic Learning series that brings learning to life by featuring compelling images, media, and text from National Geographic. Access to a media enhanced eBook is included with each reader. The National Geographic articles gathered in this reader offer students insight in to environmental concerns worldwide. Pre- and Post- reading pedagogy accompanies each article to reinforce reading skills and comprehension. The National Geographic Learning Reading Series connects current topics with reading and writing skills, and can be used in conjunction with any standard texts or online material available for your courses.

----- *National Geographic Learning Reader: Green*. Boston, MA: Cengage Learning, 2012.

Bring your learning to life with compelling images, media and text from National Geographic. *Green* will help you develop a clearer understanding of the world around you through engaging content. This reader's themes are inspired by our changing relationship with the earth, based on an understanding that the planet's resources are finite and that our future depends on preserving them. While the term "green" signifies a level of awareness about environmental concerns, it is used here in the broadest sense, to draw your attention to the state of the planet and to promote discourse on how to address the needs of the human population as well as the ecosystems that sustain life in our world. To what extent we see ourselves as members of a global community and to rethink how we will meet the growing needs of our population in the future are the two central questions this collection asks you to consider critically.

Nelson, Eric. *Cultivating Outdoor Classrooms: Designing and Implementing Child-Centered Learning Environments*. St. Paul, MN: Redleaf Press, 2012.

Create an outdoor learning program. Transform outdoor spaces into learning environments where children can enjoy a full range of activities as they spend quality time in nature. This book is filled with guidance to help you plan, design, and create an outdoor learning program that is a rich, thoughtfully equipped, natural extension of your indoor curriculum. Loaded with practical and creative ideas, it also includes information

to help you: 1) Understand how outdoor classrooms benefit children's learning and development; 2) Collaborate with other teachers, administrators, and families to make your outdoor classroom a reality; 3) Create development and action plans to strategize and implement changes; 4) Evaluate your outdoor environment, program, and practices.

Nocella, Anthony J. II, Judy K.C. Bentley and Janet M. Duncan, eds. *Earth, Animal, and Disability Liberation: The Rise of the Eco-Ability Movement*. New York, NY: Peter Lang International Academic Publishers, 2012.

This provocative and groundbreaking book is the first of its kind to propose the concept of Eco-ability: the intersectionality of the ecological world, persons with disabilities, and nonhuman animals. Rooted in disability studies and rights, environmentalism, and animal advocacy, this book calls for a social justice theory and movement that dismantles constructed "normalcy," ableism, speciesism, and ecological destruction while promoting mutual interdependence, collaboration, respect for difference, and inclusivity of our world. Eco-ability provides a positive, liberating, and empowering philosophy for educators and activists alike.

Orr, David W. *Hope is an Imperative: The Essential David Orr*. Washington, DC: Island Press, 2011.

For more than three decades, David Orr has been one of the leading voices of the environmental movement, championing the cause of ecological literacy in higher education, helping to establish and shape the field of ecological design, and working tirelessly to raise awareness of the threats to future generations posed by humanity's current unsustainable trajectory. The book features thirty-three essays, along with an introductory section that considers the evolution of environmentalism, section introductions that place the essays into a larger context, and a foreword by physicist and author Fritjof Capra.

------. *Earth in Mind: On Education, Environment, and the Human Prospect*. Washington, D.C.: Island Press, 1994.

Orr discusses the shortcomings of current educational systems and he proposes some principles for a more ecological approach to education. The first part of the book discusses the many aspects of the current problem of education. The second part discusses some fundamental principles with which people relate to the natural environment (including different concepts of love, intelligence, and virtue, different approaches to economics and politics, and different approaches to natural resources). In the third part of the book, Orr rethinks the educational systems, including colleges, disciplines, and professions, with particular attention to design, architecture, agriculture, and the liberal arts. The final part discusses some possibilities for the future of relations between humans and the natural environment.

------. *Ecological Literacy: Education and the Transition to a Postmodern World*. Albany, NY: State University of New York Press, 1992.

This book is composed of essays that Orr wrote between 1984 and 1990 on the subjects of ecological literacy and environmental education. Orr argues that education needs to undergo a transition to a postmodern world, thus moving away from the dominant suppositions of modernity and modern education (i.e., suppositions that are anthropocentric, patriarchal, consumerist, and mechanistic). The chapters of the book are divided into three parts. The first part discusses concepts and strategies for sustainability. The second part discusses the implications for education becoming postmodern, including a syllabus for ecological literacy. The third part presents critical discussion of the lack of ecological literacy in government research, corporations, and environmental management.

O'Sullivan, Edmund and Marilyn M. Taylor, eds. *Learning Toward an Ecological Consciousness: Selected Transformative Practices*. Palgrave Macmillan, 2004.

The essays in this book provide a variety of practices that are designed to help people become more aware of their relations with ecological systems. The essays are divided into three parts. The essays in this first part focus on different approaches to transforming ecological consciousness, including bioregionalism, graduate leadership education, and practices for the workplace. The second part focuses more specifically on learning about ecology through engagement in the life world, with stories related to the Pueblo people, midwifery, and various types of work (including, but not limited to, environmental work). The final part focuses on the importance of interpersonal relations and community context for transforming ecological consciousness.

Palmer, Clare, ed. *Teaching Environmental Ethics*. Leiden: Brill, 2006.

This book presents discussion of various issues related to the teaching of environmental ethics. Following an introductory essay by the editor, there are 15 other essays from various contributors, including the following: "Transforming the Market Model University" by Dane Scott; "Environmental Education and Metaethics" by Owen Goldin; "Can You Teach Environmental Ethics Without Being an Environmentalist?" by Kevin de Laplante; "Reducing Pessimism's Sway in Environmental Ethics Classroom" by Jim Sheppard; "Why Teach Environmental Ethics? Because We Already Do" by Raymond Benton and Christine Benton; "A Pragmatic, Co-Operative Approach to Teaching Environmental Ethics" by Daniel Shapiro and David Takacs; "A Being of Value: Educating for Environmental Advocacy" by Lisa Newton; "Walking the Talk: Philosophy of Conservation on the Isle of Rum" by Kates Rawles, Emily Brady, and Alan Holland; "From Delight to Wisdom" by Richard Baer, James Tantillo, et al.; "Teaching Environmental Ethics: Non-Indigenous Invasive Species as a Study of Human Relationships to Nature" by Dorothy Boose; "Environmental Ethics from an Interdisciplinary Perspective" by Jame Schafer; "Teaching the Land Ethic" by Michael Nelson; "Place and Personal Commitment in Teaching Environmental Ethics" by Philip Cafaro; "Earth 101" by Roger Gottlieb; and "Teaching Environmental Ethics to Non Specialist Students" by Hugh Mason.

Palmer, Joy. *Environmental Education in the 21st Century: Theory, Practice, Progress, and Promise*. London and New York: RoutledgeFalmer, 1998.

In this work, Palmer discusses the challenges and the promises of environmental education, both with regards to theoretical and conceptual models as well as practical concerns. Palmer begins the book with an account of the history of environmental education, and then she discusses the global implications of environmental education, particularly in light of sustainable development. In the next parts of the book, Palmer elaborates on different approaches to theory, research, and practices in environmental education. Palmer last two parts of the book further discuss the current global situation, and then provide some specific suggestions for environmental education in the twenty-first century.

Palmer, Joy, ed. *Planning Education to Care for the Earth*. Gland, Switzerland: IUCN—World Conservation Union, 1995.

Including perspectives from around the globe, this is a collection of essays exploring practical issues in environmental education. The essays are divided into three sections. The first section provides some bases from which to understand research in environmental education and communication. The second section provides case studies from NGO projects that implement or otherwise work with environmental education programs. The third section focuses on national strategies for the development and coordination of environmental education and other environmental initiatives.

Palmer, Joy and Philip Neal. *A Handbook of Environmental Education*. London and New York: Routledge, 1994.

Palmer and Neal discuss some fundamental issues in environmental education for all levels of students. The book is divided into four parts, with the first part establishing the context for discussion by describing the development, principles, and curriculum of environmental education in light of a concern for the environment. The second part focuses on the planning and practice of environmental education at the primary and secondary levels of education and in fieldwork done out of school. The third part deals with policy issues and other practicalities related to the development, coordination, implementation, assessment, and evaluation of environmental education. The fourth part provides resource materials related to environmental education, including organizations, technologies, and publications. The book also contains many helpful appendices.

Peacock, Alan. *Eco-Literacy for Primary Schools*. Staffordshire, England: Trentham Books, 2004.

This book demystifies concepts relating to ecology and sustainable development at a time when these ideas are being introduced into the primary school curriculum. Written in non-academic language, it provides a wide range of illustrative examples reflecting the everyday experiences of teachers and children. But simply explaining eco-literacy would not be enough to make a difference to teachers' practice. So the book is organized around

the questions that teachers are likely to need answered, arranged in three main sections: 1) what is eco-literacy? Why teach it? How does it fit into what we do now? 2) Connections, cycles in nature, renewable energy, ethical issues; 3) Convincing others – using without using up, human need and human greed.

Peterson-Boring, Wendy and William Forbes, eds. *Teaching Sustainability: Perspectives from the Humanities and Social Sciences*. Nacogdoches, TX: Stephen F. Austin University Press, 2014.

Sustainability education is increasingly taking a lead role in transforming the landscape of higher education, serving as a catalyst for the integration of cutting edge pedagogical practices, including project and problem-based learning, multidisciplinary learning, and transformative and collaborative education. This book documents innovative pedagogical approaches to infusing sustainability into the curriculum in the humanities and social sciences on college campuses ranging from small liberal arts colleges to major research institutions. Three sections include: 1) Conceptual Frameworks: Sustainability's Challenges to Traditional Curriculum, Disciplinary Frameworks, and Educational Paradigms; 2) In the Classroom: Case Studies and Innovative Pedagogies; 3) The Campus as Site for Place-Based Learning.

Postma, Dirk Willem. *Why Care for Nature?: In Search of an Ethical Framework for Environmental Responsibility and Education*. Dordrecht: Springer, 2006.

This book is a research monograph that proposes an ethical framework of care and conservation for environmental education, particularly in terms of education for sustainable development. The author takes into account the widespread research done in environmental education, including research from books, journals, conferences, networks of teachers, students, policy-makers, and other educational or academic professionals. The author also takes into account the United Nations Decade on Education for Sustainable Development (2005-2015).

Project Learning Tree. *Pre K-8 Environmental Education Activity Guide*. Washington, D.C.: American Forest Foundation, 2006.

This book contains 96 interdisciplinary activities that facilitate students' engagement in environmental issues. From pre-kindergarten through eighth grade, these activities provide easy and accessible ways for students to learn lessons related to a variety of environmental issues, including activities related to ecology, recycling, air quality, pollution, and urban environments. The activities are grouped into five main sections: diversity, interrelationships, systems, structure and scale, and patterns of change.

Prouty, Dick, Jane Panicucci and Rufus Collinson, eds. *Adventure Education: Theory and Applications*. Champaign, IL: Human Kinetics, 2007.

Adventure Education: Theory and Applications allows students to 1) get a broad view of adventure education and programming; 2) explore the role of games, low- and high-

element courses, and outdoor pursuits in adventure education; 3) use key concepts, student activities, and Web-based research to enhance the learning process; 4) employ real-world examples to explore strategies for adventure education in a variety of settings; and 5) learn core skills for effective facilitation and leadership preparation in adventure programming. With *Adventure Education: Theory and Applications*, adventure education enters the educational mainstream. This comprehensive text is ideal for introductory adventure courses in a variety of college departments and as a reference for professionals in the field.

Pyle, Jean L., William Lazonick, Charles Levenstein and Robert Forrant, eds. *Approaches to Sustainable Development: The Public University in the Regional Economy*. Amherst, MA: University of Massachusetts Press, 2001.

How can cities and regions foster sustainable development? What role can a university play in this process? These are the central questions addressed in this innovative collection of essays, which brings together scholars in such diverse fields as history, political economy, community studies, industrial theory, economic geography, environmental studies, ergonomics and work design, race and gender studies, manufacturing engineering, and public health. In 1993 a core group of faculty members at the University of Massachusetts Lowell launched an interdisciplinary study to find ways for the university to help stimulate regional development on a sustainable basis. They looked at models of development, new processes, and practical tools for transforming ideas into actions. At the same time, they moved beyond traditional research paradigms that focus on business growth and technology diffusion to the exclusion of social, environmental, and cultural development. Lowell is an ideal place for exploring these issues, given its rich industrial and immigrant history and the University's expertise as a science and engineering institution. The product of this research is a set of thoughtful essays that span the physical and social sciences, engineering, and the humanities and engage the debate over how best to achieve sustainable development - a debate in which issues of social justice, popular participation, and economic development are inextricably linked.

Ranjan, Rahul. *Environmental Education*. New Delhi: Mohit, 2004.

This study presents an analysis of the history and the implications of environmental education. It accounts for the relations between governmental and non-governmental organizations, and it provides an analysis of policy making processes. There are ten chapters, focusing on issues such as environmental values, environmental ethics, environmental assessment, environmental intervention, sustainable development, politics, species extinction, biotechnology, the ozone layer, and the future quality of the environment.

Rappaport, Ann and Sarah Hammond Creighton. *Degrees that Matter: Climate Change and the University*. Cambridge, MA: MIT Press, 2007.

This work discusses the role of universities in leading new initiatives and developing new policies in response to global climate change. The authors discuss the social, economic, political, and scientific contexts of climate change issues, and they also provide practical suggestions for ways of implementing change. Some of the issues discussed include sources of greenhouse gas emissions on campus, costs, budgets, planning and decision-making processes, projects to reduce emissions, and various projects that allow students to take action.

Reagan, Timothy. *Non-Western Educational Traditions: Indigenous Approaches to Educational Thought and Practice*. New York, NY: Routledge, 2004.

The book works to expand, not replace, current understandings of Western education, by examining approaches less familiar to Western education practitioners. For those who are teaching and want to incorporate non-western teaching practices into current curricula, this book has a foundational background on a range of indigenous educational practices.

Reardon, Betty and Eva Nordland, eds. *Learning Peace: The Promise of Ecological and Cooperative Education*. Albany: State University of New York Press, 1994.

This is a collection of essays that articulate ecological and cooperative approaches to education, including discussion of issues such as the future, peace, democracy, and social responsibility. There are ten essays, including the following: “New World—New Thinking—New Education” by Eva Nordland; “Learning Our Way to a Human Future” by Betty Reardon; “New Thinking: Its Application for New Learning” by Valentina Mitina; “‘Big Ideas’ of Ecology that Every Peace Educator Should Know” by Willard Jacobson; “Social Responsibility and Ecological Culture through Ecological Education” by Sergei Polozov; “Educational Planning for an Ecological Future” by Susan Ahearn; “Education for Democracy, Social Responsibility, and Creative Activity in the Russia of Today” by Anatoly Golovatenko; “Peace Education, Social Responsibility, and Cooperation” by Galina Kovalyova; “Ecological Leadership in an Age of Diminishing Superpower Expectations” by Robert Zuber; “Steps to a Renewal of Education: Concluding Words” by Eva Nordland.

Reynolds, Heather L., Eduardo S. Brondizio and Jennifer Meta Robinson, eds. *Teaching Environmental Literacy: Across Campus and Across the Curriculum*. Bloomington, IN: Indiana University Press, 2010.

To prepare today's students to meet growing global environmental challenges, colleges and universities must make environmental literacy a core learning goal for all students, in all disciplines. But what should an environmentally literate citizen know? What teaching and learning strategies are most effective in helping students think critically about human-environment interactions and sustainability, and integrate what they have learned in diverse settings? Educators from the natural and social sciences and the humanities discuss the critical content, skills, and affective qualities essential to environmental literacy. This volume is an invaluable resource for developing integrated, campus-wide

programs to prepare students to think critically about, and to work to create, a sustainable society.

Russ, Alex, ed. *Measuring Environmental Education Outcomes*. Washington, DC: NAEE, 2014. Free E-Book, <http://www.naaee.net/publications/MEEO>

In this e-book, 20 environmental educators across the U.S. are trying to offer a fresh look at environmental education outcomes and their measurement. E-book chapters address such questions as: What counts as outcomes of environmental education? How can their measurement be part of environmental education curricula? How to monitor long-term impacts of environmental education programs? The e-book is prepared for environmental educators and program evaluators.

Saint-Preux, Morisset. *Eco Literacy Workbook for the Future Green-Collar Worker*. Charleston, SC: BookSurge Publishing, 2009.

The possibilities for careers and job growth in this emerging green/clean industry are endless. This workbook offers a unique opportunity to those seeking to build a solid foundation in their quest to secure a career in this emerging industry. This book is specially designed for individuals with limited academic background and for limited English readers and speakers. It is also intended for the following populations: middle-school and high-school students, construction workers, career changers, homeowners, etc. This workbook will not only acquaint you with the lingo and the vocabulary associated with clean/green energy, but also will convey to the future green-collar worker a sense of responsibility to public safety, health, and comfort. Students are introduced to the fundamentals of building science and to the building envelope while exploring the issues of climate change, in-door air quality, weatherization and energy conservation, tools recognition, worksite safety, home energy audit, recycling, and green jobs. This workbook is a living document; make it your material of choice.

Sanera, Michael and Jane S. Shaw. *Facts, Not Fear: Teaching Children about the Environment*. Rev. ed. Washington, DC: Regnery Publishers, 1999.

This book presents an easily accessible account of environmental issues that helps parents and teachers educate children with facts, thus correcting or avoiding common misconceptions about the current environmental crisis. There are also some appendices that include a list of reviewed textbooks, a list of environmental textbooks for children, and a list of books for an environmental library. The book addresses questions about science, facts, natural resources, loss of forests (including rainforests), species extinction, air pollution, climate change, ozone, acid rain, water, food, garbage, and recycling. The final chapter discusses some possibilities for what we can do.

Saylan, Charles and Daniel T. Blumstein. *The Failure of Environmental Education (And How We Can Fix It)*. Los Angeles, CA: University of California Press, 2011.

At a time when wild places everywhere are vanishing before our eyes, Charles Saylan and Daniel T. Blumstein offer this passionate indictment of environmental education—along with a new vision for the future. Writing for general readers and educators alike, Saylan and Blumstein boldly argue that education today has failed to reach its potential in fighting climate change, biodiversity loss, and environmental degradation. In this forward-looking book, they assess the current political climate, including the No Child Left Behind Act, a disaster for environmental education, and discuss how education can stimulate action—including decreasing consumption and demand, developing sustainable food and energy sources, and addressing poverty. Their multidisciplinary perspective encompasses such approaches as school gardens, using school buildings as teaching tools, and the greening of schoolyards. Arguing for a paradigm shift in the way we view education as a whole, *The Failure of Environmental Education* demonstrates how our education system can create new levels of awareness and work toward a sustainable future.

Sayre, Laura and Sean Clark, eds. *Fields of Learning: The Student Farm Movement in North America*. Lexington, KY: The University Press of Kentucky, 2011.

Where will the next generation of farmers come from? What will their farms look like? *Fields of Learning: The Student Farm Movement in North America* provides a concrete set of answers to these urgent questions, describing how, at a wide range of colleges and universities across the United States and Canada, students, faculty, and staff have joined together to establish on-campus farms as outdoor laboratories for agricultural and cultural education. From one-acre gardens to five-hundred-acre crop and livestock farms, student farms foster hands-on food-system literacy in a world where the shortcomings of input-intensive conventional agriculture have become increasingly apparent. They provide a context in which disciplinary boundaries are bridged, intellectual and manual skills are cultivated together, and abstract ideas about sustainability are put to the test.

Editors Laura Sayre and Sean Clark have assembled a volume of essays written by pioneering educators directly involved in the founding and management of fifteen of the most influential student farms in North America. Arranged chronologically, *Fields of Learning* illustrates how the student farm movement originated in the nineteenth century, gained ground in the 1970s, and is flourishing today – from the University of California—Davis to Yale University, from Hampshire College to Central Carolina Community College, from the University of Montana to the University of Maine.

Schlottmann, Christopher. *Conceptual Challenges for Environmental Education: Advocacy, Autonomy, Implicit Education and Values*. New York, NY: Peter Lang International Academic Publishers, 2012.

Conceptual Challenges for Environmental Education is a critical analysis of environmental education from the perspective of educational ethics. It spells out elements of the conceptual foundations of an environmental education theory - among them implicit education, advocacy, Decade of Education for Sustainable Development, and climate change - that can both advance our understanding of and improve our responses to modern environmental problems. The book is intended to broaden the types of

environmental education practiced, specifically by attempting to draw on the integrative strengths of liberal education. At their core, environmental problems require both ethical and integrative understanding as part of their solutions: this book proposes strategies for incorporating such understanding into our educational theories and programs.

Scott, William and Stephen Gough. *Sustainable Development and Learning: Framing the Issues*. London and New York: RoutledgeFalmer, 2003.

This is a primer that introduces theoretical and practical issues of environmental education, particularly in terms of lifelong learning about sustainable development. The authors discuss ways of framing issues of sustainable development, including attention to complexity, risk, uncertainty, language, values, policy, ideology, curriculum, economic behavior, science, and processes of globalization. This primer is accompanied by *Key Issues in Sustainable Development and Learning: A Critical Review* (2004), which is a book of readings that correspond with each chapter in this book.

Scott, William and Stephen Gough, eds. *Key Issues in Sustainable Development and Learning: A Critical Review*. London and New York: RoutledgeFalmer, 2004.

This is a collection of readings and vignettes that discuss education for sustainable development. These readings are organized into chapters that correspond with an accompanying book, *Sustainable Development and Learning: Framing the Issues* (2003). The selections in this book present critical accounts of various issues related to learning and sustainable development, including complex and uncertain issues of ideology, values, agency, policy, pedagogy, curriculum, lifelong learning, science, economic behavior, poverty, methods of assessment and evaluation for education, and processes of globalization.

Seidel, Jackie and David Jardine. *Ecological Pedagogy, Buddhist Pedagogy, Hermeneutic Pedagogy: Experiments in a Curriculum for Miracles*. New York, NY: Peter Lang International Academic Publishers, 2014.

This book explores three interrelated roots of scholarly work that have a supportive and elaborative affinity to authentic and engaging classroom inquiry: ecological consciousness, Buddhist epistemologies, philosophies and practices, and interpretive inquiry or “hermeneutics.” Although these three roots originate outside of and extend far beyond most educational literature, understanding them can be of immense practical importance to the conduct of rich, rigorous, practicable, sustainable, and adventurous classroom work for students and teachers alike.

The authors collectively bring to these reflections decades of classroom experience in grades K-12 and the experience of supervising hundreds of student teachers in such settings as well as working regularly with schools and classroom teachers in their day-to-day work. The authors demonstrate, through several classroom examples, how ecology, Buddhism, and hermeneutics provide ways to re-invigorate the often-moribund discourse of education and bring a sense of beauty and rigorous joy to classroom life for teachers and students alike.

Seymour, Mike, ed. *Educating for Humanity: Rethinking the Purposes of Education*. Boulder, CO: Paradigm Publishers, 2004.

This is a collection of interviews and essays that articulate new horizons in the field of education, particularly with a view to reconnecting the individual self to its social, ecological, and spiritual contexts. Following an introductory essay by the editor, the selections are divided into five parts, with a brief introduction from the editor at the beginning of each part. The first part focuses on the “Great Work” of education, which involves reorienting the human to wisdom and to the web of life. The second and third parts respectively discuss the roles of the self and of community in this approach to education. The fourth part discusses the meaning of the Earth and ecological education. The fifth part discusses the place of spirit in schools, focusing on the significance of the heart, soul, character, mystery, and meaning in education. Contributors include Fritjof Capra, Rachael Kessler, Don Trent Jacobs, Parker Palmer, Nancy Carlsson-Paige, Linda Lantieri, David Jardine, Gregory A. Smith, Dilafruz R. Williams, David Orr, Thomas Berry, James A. Banks, Sonia Nieto, Thomas Sergiovanni, Eric Schaps, Nel Noddings, Deborah Meier, Ronald Veronda, Sam M. Intrator, Michael Meade, Lauren de Boer, and Duane Elgin.

Shallcross, Tony, John Robinson, Paul Pace, and Arjen Wals, eds. *Creating Sustainable Environments in Our Schools*. Stoke-on-Trent, UK: Trentham Books, 2006.

Written mainly for teachers and other education professionals, this book is a contribution to the UN decade of education for sustainable development. The selections in the book deal with theoretical and practical issues, including analyses of case studies. The first part of the book focuses on proposals for whole school approaches to school development, which entails criticisms of the current model of school development. The second part of the book focuses on case studies in Malta, Greece, the Netherlands, and England.

Sharma, Sanjay Prakash. *Environmental Education*. Delhi: Vista International, 2006.

This book focuses on various topics related to theoretical and practical issues in environmental education. The author discusses strategies for environmental education, including ways of teaching it and implementing it. There are chapters include accounts of adult environmental education, sustainable development, environmental education with computers, sanitation and hygiene education in India, the United Nations decade of education for sustainable development, the Belgrade charter, and the Declaration of the Tbilisi Intergovernmental Conference on Environmental Education.

Shaw, Jane S, eds. *A Blueprint for Environmental Education*. Bozeman, MT: Political Economy Research Center, 1999.

This book discusses the role of economics in the field of environmental education. It contains 14 articles, with contributions from 11 different authors. The essays discuss

some of the shortcomings of current trends in environmental education, and they show some ways in which the introduction of an economic perspective can help environmental education address more concrete problems and foster critical thinking skills.

Smith, Gregory. *Education and the Environment: Learning to Live Within Limits*. Albany, NY: State University of New York Press, 1992.

In this work, Smith discusses the current environmental crisis in light of its implications for society and for education. Smith criticizes many modern forms of education, which have supported the capitalism and industrialism that have accompanied the rise of the environmental crisis. Smith suggests that alternative models of education are already available, and that these alternatives would make possible a more sustainable relationship to the world.

Smith, Gregory A. and Dilafruz R. Williams, eds. *Ecological Education in Action: On Weaving Education, Culture, and the Environment*. Albany, NY: State University of New York Press, 1999.

This book contains an introductory essay followed by 12 other essays that discuss ecological approaches to education. The first half of the book focuses on K-12, and the second half of the book focuses on higher education. Contributions include the following: “Stories from Our Common Roots: Strategies for Building an Ecologically Sustainable Way of Learning” by Joseph Kiefer and Martin Kemple; “Deepening Children’s Participation through Local Ecological Investigations” by Paul Krapfel; “From Human Waste to the Gift of Soil” by Madhu Suri Prakash and Hedy Richardson; “From Margin to Center: Initiation and Development of an Environmental School from the Ground Up” by Dilafruz Williams and Sarah Taylor; “Exploring Children’s Picture Books through Ecofeminist Literacy” by Elaine Schwartz; “Education Indigenous to Place: Western Science Meets Native Reality” by Angayuqaq Oscar Kawagley and Ray Barnhart; “Liberation and Compassion in Environmental Studies” by Stephanie Kaza; “Changing the Dominant Cultural Perspective in Education” by C. A. Bowers; “Environmental Autobiography in Undergraduate Educational Studies” by Peter Blaze Corcoran; “Reclaiming Biophilia: Lessons from Indigenous Peoples” by Gregory Cajete; “Creating a Public of Environmentalists: The Role of Nonformal Education” by Gregory Smith; “Reassembling the Pieces: Ecological Design and the Liberal Arts” by David Orr.

Sobel, David. *Place-Based Education: Connecting Classrooms and Communities*. Great Barrington, MA: Orion Society, 2004.

This is a short work (about 100 pages) discussing place-based education. This type of education bases its curriculum on connections to local community and the natural environment. Ultimately, place-based education attempts to create actively engaged citizens.

-----, *Beyond Ecophobia: Reclaiming the Heart in Nature Education*. Great Barrington, MA: Orion Society and Myrin Institute, 1996.

Ecophobia is a fear of the future of the planet. Through exposure to mass media, this debilitating fear is learned by children, who have little or no exposure to the pleasurable, safe, and joyous relationships that one can have with the natural world. Nature education makes it possible for children to overcome ecophobia by practicing environmental education activities. This is a slightly expanded version of an essay that appeared in Orion Magazine.

Stapp, William. *Environmental Education for Empowerment: Action Research and Community Problem Solving*. 1996.

This book proposes an integration of two areas of education that can be applied to environmental education, Action Research and Community Problem Solving, which are combined with the acronym ARCPS. The book is divided into four parts, which look at theoretical and practical implications of ARCPS. The first part introduces conceptual and methodological models for ARCPS. The second part provides four case studies of ARCPS at work in different educational contexts. The third part provides concrete suggestions for ways of applying ARCPS to classroom situations, and the fourth part contains some activities for using in these applications.

Sterling, Stephen R. *Sustainable Education: Re-Visioning Learning and Change*. Dartington: Schumacher Society, 2001.

In this briefing, Sterling discusses trends in environmental education and education for sustainable development, noting that these efforts are not sufficient for the radical transformation of which education is currently in need. Sterling criticizes the mechanistic and managerial thinking that dominates the current paradigm in education, and he proposes an ecological vision of sustainable education that facilitates transformative learning at all levels of the education system.

Sterling, Stephen, Larch Maxey and Heather Luna, eds. *The Sustainable University: Progress and Prospects*. New York, NY: Routledge, 2013.

The direction of higher education is at a crossroads against a background of mounting sustainability-related issues and uncertainties. This book seeks to inspire positive change in higher education by exploring the rich notion of the sustainable university and illustrating pathways through which its potential can be realized. Based on the experience of leading higher education institutions in the UK, the book outlines progress in the realization of the concept of the “sustainable university” appropriate to the socioeconomic and ecological conditions facing society and graduates.

Written by leading exponents of sustainability and sustainability education, this book brings together examples, insight, reflection and strategies from the experience of ten universities, widely recognized as leaders in developing sustainability in higher education. The book thus draws on a wealth of experience to provide reflective critical analysis of barriers, achievements, strategies and potential. It critically reviews the theory

and practice involved in developing the sustainable university in a systemic and whole institutional manner, including the role of organizational learning.

While remaining mindful of the challenges of the current climate, *The Sustainable University* maps out new directions and lines of research as well as offering practical advice for researchers, students and professionals in the fields of management, leadership, organizational change, strategy and curriculum development who wish to take this work further.

Stevenson, Robert B., Michael Brody, Justin Dillon and Arjen E.J. Wals, eds. *International Handbook of Research on Environmental Education*. New York, NY: Routledge, 2012.

The environment and contested notions of sustainability are increasingly topics of public interest, political debate, and legislation across the world. Environmental education journals now publish research from a wide variety of methodological traditions that show linkages between the environment, health, development, and education. The purpose of this 51-chapter handbook is not only to illuminate the most important concepts, findings and theories that have been developed by EE research, but also to critically examine the historical progression of the field, its current debates and controversies, what is still missing from the EE research agenda, and where that agenda might be headed.

Stibbe, Arran. *The Handbook of Sustainability Literacy: Skills for a Changing World*. Cambridge: UIT Cambridge, Ltd., 2009.

A vital resource for sustainability educators and decision-makers, this groundbreaking book joins leading sustainability educators with permaculturists, literary critics, ecologists, artists, journalists, engineers, mathematicians, and philosophers in a deep reflection on the skills that people need to survive and thrive in the challenging conditions of the 21st century. Responding to the threats of climate change, peak oil, resource depletion, economic uncertainty, and energy insecurity demands the utmost in creativity, ingenuity, and new ways of thinking in order to reinvent self and society. Among the many skills, attributes, and values described in this volume are values reflection, coping with complexity, permaculture design, transition skills, advertising awareness, effortless action, and ecological intelligence, each accompanied by ideas for active learning exercises to help develop the skill. Far from being a rigid or definitive statement of the one right way, however, the handbook is exploratory, aiming to open up new, unthought-of paths, possibilities, and choices. It is intended for anyone interested in the literally vital issue of the skills we need to survive and thrive in the 21st century and build a more sustainable future. Contributors include John Naish, Satish Kumar, Patrick Whitefield, John Blewitt, Stephan Harding, and Stephen Sterling.

Stone, Michael. *Smart by Nature: Schooling for Sustainability*. Berkeley, CA: Center for Ecoliteracy, 2009.

An inspirational and practical exploration of bringing “eco consciousness” to K-12 education, *Smart by Nature* shows how schools and districts across the country are orienting their activities around environmental responsibility and wisdom: in gardens and

cafeterias, on campuses, with nature-based curriculums, and in the communities that surround their schools.

Stone, Michael K. and Zenobia Barlow, eds. *Ecological Literacy: Education Our Children for a Sustainable World*. San Francisco, CA: Sierra Club Books, 2005.

This is a collection of writings that address theoretical and practical issues related to “ecological literacy,” which is not simply about environmental education, for it is more fundamentally a matter of developing an ecological orientation to all levels and types of education. Following a “Foreword” by David W. Orr, a “Preface” by Fritjof Capra, and an “Introduction” by the editors, the remaining selections are divided into four parts: Vision, Tradition/Place, Relationship, and Action. The first part focuses on concepts and values related to ecology and sustainability. The second part explores traditional and place-based pedagogies. The third part deals with the place of community projects in ecological literacy. The fourth part focuses on active engagements with ecological literacy, both in light of the conceptual contributions of systems thinking and in light of practical examples of concrete projects (e.g., the Private Eye Project, programs for urban youth activism, and the Rethinking School Lunch Program, which was developed by the Center for Ecoliteracy).

Stremba, Robert and Christian Bisson, eds. *Teaching Adventure Education Theory: Best Practices*. Champaign, IL: Human Kinetics, 2009.

Teaching Adventure Education Theory: Best Practices offers stimulating, fun, and engaging activities instructors can use to assist future adventure educators, outdoor leaders, and group facilitators in making the connections between adventure theory and practice. Written for students and instructors who want their classroom experience to be as involving as the field environment, this professional reference features ready-to-use lesson plans that employ experiential education strategies for presenting the theory underlying the technical and facilitation skills required in leading adventure experiences.

Editors Stremba and Bisson and leading adventure educators from the United States, Canada, Australia, and Japan provide an extensive perspective on teaching adventure theory, philosophy, history, and conceptual models through the use of activity-based learning. They offer a collection of 34 lesson plans that can be easily modified to fit individual teaching styles or student needs. Each lesson plan provides detailed activity instructions, teaching suggestions, and an overview of the theory taught in the lesson to provide the instructor with background conceptual material. An instructor CD-ROM, included with the text, contains student handouts, worksheets, and PowerPoint presentations to facilitate lesson implementation and assessment.

Teaching Adventure Education Theory presents experiential lesson plans covering such topics as: 1) Instructional theory and curriculum design processes; 2) History of adventure education 3) Educational and philosophical foundations of adventure education, including lessons on John Dewey's contributions; 4) Central theories supporting common field practices, including optimal arousal theory, self-efficacy theory, attribution theory, and the flow theory; 5) Leadership models and theories; 6) Ethical and social justice issues, and more.

Thomashow, Mitchell. *The Nine Elements of a Sustainable Campus*. Cambridge, MA: The MIT Press, 2014.

A college campus offers an ideal setting for exploring and practicing sustainability. Colleges and universities offer our best hope for raising awareness about the climate crisis and the dire threat it poses to the planet. They provide opportunities for both research and implementation; they have the capacity to engage students, staff, and faculty in collaborative enterprises that inspire campus transformation; they take the idea of legacy seriously. But most college and university administrations need guidance on the path to sustainability. In *The Nine Elements of a Sustainable Campus*, Mitchell Thomashow, a former college president, provides just that. When Thomashow became president of Unity College, a small environment-focused college in Maine, in 2006, he decided to focus his leadership on sustainability. Drawing on his experiences at Unity, Thomashow identifies nine elements for organizing a sustainability agenda: energy, food, and materials (aspects of infrastructure); governance, investment, and wellness (aspects of community); and curriculum, interpretation, and aesthetics (aspects of learning). Thomashow describes, among other things, how Unity built the first platinum LEED-certified college president's residence in North America; installed solar panels, wind turbines, and other renewable energy generators all over the campus; became a center for local food growing; reconsidered the college's capital assets and investment strategy in light of sustainability; revitalized the curriculum; and made the entire campus a canvas for sustainability-inspired public art. Connecting his experiences to broader concerns, Thomashow links the campus to the planet, reminding us that local efforts, taken together, can have a global impact.

------. *Bringing the Biosphere Home: Learning to Perceive Global Environmental Change*. Cambridge, MA: MIT Press, 2002.

In this book, Thomashow discusses ways in which human experiences of global change in the environment can deepen by learning how to perceive the biosphere. Thomashow opens the book by discussing this perceptual challenge of learning about global environmental change, and then he proceeds to discuss the experience of globality and its relation to global environmental change. After discussing these initial concepts, Thomashow proposes his perceptual ecology and discusses different ways of interpreting the biosphere in light of place-based perceptions as well as perceptions that emerge through networks of information and transportation (e.g., the Internet and the interstate). Thomashow concludes by applying these insights to education and proposing a biospheric curriculum.

------. *Ecological Identity: Becoming a Reflective Environmentalist*. Cambridge, MA: MIT Press, 1995.

Thomashow presents an accessible narrative that describes various ways that people can become reflective environmentalists and construct an ecological identity. Ecological identity includes one's personal identity as well as professional, political, and spiritual

dimensions of one's identity. Accordingly, Thomashow indicates how one can learn about the environmental implications of these different dimensions of one's life. The concluding chapter focuses specifically on environmental education and classroom experiences, but Thomashow also discusses education and examples from the classroom throughout the rest of the work. Thomashow also includes discussion of prominent environmentalists like Henry David Thoreau, Rachel Carson, and Gary Snyder.

Thompson, Patricia J., ed. *Environmental Education for the 21st Century: International and Interdisciplinary Perspectives*. New York: Peter Lang, 1997.

This is a collection of essays that explore numerous issues related to environmental education and the challenges of the 21st century. The book addresses global and international dimensions of environmental education and includes perspectives that cross disciplinary boundaries. There are suggestions for ways to develop an environmental curriculum, particularly with reference to the social sciences, the humanities, journalism, and business. There are also suggestions for ways of greening the academic environment. This book is based on a conference on environmental education (organized by the editor) that took place for a week in 1995.

Tilbury, Daniella, Robert B. Stevenson, John Fien, and Danie Schreuder, eds. *Education and Sustainability: Responding to the Global Challenge*. Gland, Switzerland: IUCN—The World Conservation Union, 2002.

This collection of writings focuses on the global challenge of educating for sustainability. The essays are grouped together according to the geographical region discussed in that essay. Along with two introductory essays that discuss global and international perspectives on sustainability and education, the book includes discussions of sustainability and education issues in Asia (Vanuatu, the Philippines, Indonesia, Nepal, and India), Europe (Wales, Spain, and Hungary), southern Africa (including Zimbabwe and South Africa), and the Americas (Canada, El Salvador, and the United States of America). An essay by Robert B. Stevenson provides some concluding and summary remarks.

Timpson, William, Brian Dunbar, Gailmarie Kimmel, Brett Bruyere, Peter Newman, and Hillary Mizia, eds. *147 Tips for Teaching Sustainability: Connecting the Environment, the Economy, and Society*. Madison, WI: Atwood Publishing, 2006.

We are the first generation capable of determining the habitability of the planet for humans and other species, writes Anthony Cortese in the Foreword. Teachers at every level can play an important role in helping us find a sustainable path. One educator is fond of saying that, The stone age didn't end because of a lack of rocks While there was certainly an abundance of rocks available, stone age people moved on to a new era because it became possible for them to envision and create a different and more useful way of organizing life. Many believe that we are currently at a similar juncture and can begin to imagine and construct new ways to live on our planet. All who work with sustainability issues realize that it is a community project. We must decide collectively

about the earth and its future. As a community, be it a geographic, social, academic, or professional community, we need to know where to begin, how to collaboratively work, and where to find resources. Most of us belong to communities that are concerned about sustainability issues, but do not have that as their primary mandate, such as a business, a history class, or a civic group. These groups have a tremendous opportunity to incorporate sustainability awareness into their activities. And this volume will help find those opportunities and make the best use of group resources.

Tippins, Deborah, Michael Mueller, Michiel van Eijck, and Jennifer Adams, eds. *Cultural Studies and Environmentalism: The Confluence of EcoJustice, Place-based (Science) Education, and Indigenous Knowledge Systems*. New York: Springer, 2010.

This book opens up ways in which home-grown talents, narratives, and knowledge can be developed, and eco-region awareness and global relationships can be facilitated. Incorporating diverse perspectives that include photography, poetry and visual art, the work provides a nuanced lens for evaluating educational problems and community conditions while protecting and conserving the most threatened and vulnerable narratives. This book brings into better focus a vital role for the Earth's ecosystems in the context of ecosociocultural theory and participatory democracy alike.

Van den Bor, Wout, Peter Holen, Arjen Wals, and Walter Leal Filho, eds. *Integrating Concepts of Sustainability into Education for Agriculture and Rural Development*. New York, NY: Peter Lang International Academic Publishers, 2000.

The book deals with the issue of sustainability as a whole and to its application in the context of higher agricultural education in particular. It contains a wide range of international experiences on the subject, deriving from case studies, projects and research performed in Europe, North America and Oceania. This publication provides a key contribution to the debate on sustainability at university level and on how it is applied to agriculture and rural development.

Van Matre, Steve. *Earth Education: A New Beginning*. Greenville, WV: Institute for Earth Education, 1990.

This book presents a proposal for an alternative path to mainstream education, which often contributes to ignorance about environmental issues. This alternative is The Earth Education Path, which helps people change behavior in such a way as to facilitate the development of new lifestyles and more meaningful engagements that take place in harmony with the life systems and communities of the Earth. The author discusses conceptual issues about the difference between mainstream education and Earth Education and he also provides concrete suggestions for practices and policies that implement Earth Education.

Wals, Arjen E.J. and Peter Blaze Corcoran. *Learning for Sustainability in Times of Accelerating Change*. Wageningen: Wageningen Academic Publishers, 2012.

We live in turbulent times; our world is changing at accelerating speed. Information is everywhere, but wisdom appears in short supply when trying to address key inter-related challenges of our time such as; runaway climate change, the loss of biodiversity, the depletion of natural resources, the on-going homogenization of culture, and rising inequity. Living in such times has implications for education and learning. This book explores the possibilities of designing and facilitating learning-based change and transitions towards sustainability. In 31 chapters contributors from across the world discuss (re)emerging forms of learning that not only assist in breaking down unsustainable routines, forms of governance, production and consumption, but also can help create ones that are more sustainable. The book has been divided into three parts: re-orienting science and society, re-connecting people and planet and re-imagining education and learning. This is essential reading for educators, educational designers, change agents, researchers, students, policymakers and entrepreneurs alike, who are concerned about the well-being of the planet and convinced of our ability to do better.

Ward, Harold. *Acting Locally: Concepts and Models for Service Learning in Environmental Studies*. Sterling, VA: Stylus Publishing, 1999.

Ninth in the *Service-Learning in the Disciplines Series*, this book discusses the pervasive use of service-learning in environmental studies programs and explains why it often is a required part of the environmental studies curriculum. Contributors from a wide range of college and university environmental studies programs discuss the benefits and challenges these programs provide and the consequent natural fit between environmental studies and service-learning.

Ward, Jennifer and Richard Louv. *I Love Dirt!: 52 Activities to Help You and Your Kids Discover the Wonders of Nature*. Boston, MA: Trumpeter Books, 2008.

I Love Dirt! presents 52 open-ended activities to help you engage your child in the outdoors. No matter what your location—from a small patch of green in the city to the wide-open meadows of the country—each activity is meant to promote exploration, stimulate imagination, and heighten a child's sense of wonder.

Waters, Alice. *Edible Schoolyard: A Universal Idea*. San Francisco, CA: Chronicle Books, 2008.

One of America's most influential chefs, Alice Waters created a revolution in 1971 when she introduced local, organic fare at her Berkeley, California, restaurant, Chez Panisse. Twenty-five years later, she and a small group of teachers and volunteers turned over long-abandoned soil at an urban middle school in Berkeley and planted the Edible Schoolyard. The schoolyard has since grown into a universal idea of Edible Education that integrates academics with growing, cooking, and sharing wholesome, delicious food. With inspiring images of the garden and kitchen, and their young caretakers, *Edible Schoolyard* is at once a visionary model for sustainable farming and childhood nutrition, and a call to action for schools across the country.

Wenden, Anita L. ed. *Educating for a Culture of Social and Ecological Peace*. Albany, NY: State University of New York Press, 2004.

This book examines the overlapping aims, values, and concepts in peace and environmental education. Acknowledging the dual notions of danger and opportunity that present themselves in contemporary social and ecological crises, this book explores how both peace and environmental education can transform the way we think and what we value. The book outlines the link between social violence and ecological degradation and the need to educate for the purpose of achieving social and ecological peace. Specialists in peace and environmental education offer a holistic and integrated approach on educating about these problems and challenges. They also provide educational strategies, such as curricular frameworks and pedagogical innovations appropriate for both formal and informal settings, and case studies and examples that illustrate their application.

Wheeler, Keith A. and Anne Perraca Bijur, eds. *Education for a Sustainable Future: A Paradigm of Hope for the 21st Century*. New York: Kluwer Academic Publishers, 2000.

This collection of essays explores ways in which an integrated educational experience can include sustainability along with information technologies and creative visions of the future. Following an introductory essay by Keith Wheeler, there are seventeen other contributions that present reflections on different aspects of such an educational experience. Some of the topics discussed include the following: educational challenges of global change, policies for sustainability education, issues of higher education, public education, projects of teacher education, education in science, explorations of particular sustainable communities and learning communities, issues of sustainable development, problems of national security, the role of the World Conservation Union (IUCN) for education in sustainability, an example of American high school education, the role of General Motors (GM) in sustainability education, and a case study from SC Johnson.

Wilke, Richard J. *Environmental Education Teacher Resource Handbook*. Newbury Park, CA: Corwin, 1995.

One of a series of practical references for teachers, this handbook provides general information on the background of the environmental studies curriculum in the United States. It contains current information on publications, standards and special materials for the curriculum, and is designed to be adapted to suit particular schools.

Williams, Dilafruz and Jonathan Brown. *Learning Gardens and Sustainability Education: Bringing Life to Schools and Schools to Life*. New York, NY: Routledge, 2011.

Offering a fresh approach to bringing life to schools and schools to life, this book goes beyond touting the benefits of learning gardens to survey them as a whole-systems design solution with potential to address myriad interrelated social, ecological, and educational issues. The theoretical and conceptual framework presented creatively places soil at the center of the discourse on sustainability education and learning garden design and pedagogy. Seven elements and attributes of living soil and learning gardens are presented

as a guide for sustainability education: cultivating a sense of place; fostering curiosity and wonder; discovering rhythm and scale; valuing biocultural diversity; embracing practical experience; nurturing interconnectedness. The living soil of learning gardens forms the basis of a new metaphoric language serving to contest dominant mechanistic metaphors presently influencing educational discourse. Student voices and examples from urban schools provide practical understanding of how bringing life to schools can indeed bring schools to life.