

# Why Sustainability Education Needs Pedagogies of Reflection and Contemplation

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Our seminar text—Alice Walker’s *Overcoming Speechlessness*—closed slowly within a student’s hands as her words faltered, and tears began to fall. The tears were accompanied by a long period of silence, others’ averted eyes, and a palpable sense of collective unease.

At last, another student spoke into the silence, “At least people—even people in the worst of circumstances such as Walker describes in this book—even those people have a chance to learn and make change. But, what about the trees in disappearing forests or the irradiated marine life off the coast of Japan? What about other species and the planet?”

This response was followed by more silence, an even more awkward and uncomfortable silence. Another student finally spoke, but his voice did not have the usual confidence, nor did he provide an analysis with his characteristic sword-like precision. As his body hunched over in his chair, his eyes remained downcast, he said: “My biggest issue is just showing up for class, what’s the point when we’re headed for extinction?”

Early in 2009, a small group of faculty members in the Puget Sound bioregion gathered in a big open meeting room—The Thomas Berry Hall-- at the Whidbey Institute to talk about how to make a creative response to the sense of helplessness and hopelessness that arises in our classrooms as we study and discuss the realities of our current global crises. We shared stories of the challenges—both for us and for our students—in learning how to cope with the complexity of the social and ecological challenges we face, how to wrestle with opposing perspectives on highly charged issues, and how to develop greater awareness of the interconnectivity of these issues and challenges, including our own relationships to them and each other. We also shared stories about hope, agency and resolve as we negotiate the grief and despair that comes with the study of these daunting problems.

Collectively we have focused our attention on what it means to flourish as humans in harmony with our natural world, as well as what it means to act ethically and compassionately in the 21st century, and to wonder about the necessary unity of mind and nature. We also explored ways to inspire students with examples of individual and collective action that support the future viability of the planet as well as social justice for all its peoples, including relationships between these peoples and the non-human. As we explored our varying approaches to the use of contemplative and reflective activities in our classes, we also began to share additional ideas about how these approaches might inform the development of pedagogical and curricular responses to the challenges related to these global crises. These conversations led to the formation, in 2010, of a small “faculty learning community” within the Curriculum for the Bioregion Initiative to explore the role of reflection and contemplation in sustainability education.

Other colleagues in this initiative are developing discipline-specific sustainability learning, but our working group has been exploring how the pedagogical tools of reflection and contemplation can be used to enhance sustainability education across multiple disciplines from arts and humanities to the natural and social sciences.<sup>1</sup> The uses of reflective and contemplative practices in the classroom are still emerging and many are still experimental. Even though we represent a range of institutional types and a range of disciplines, our shared stories are becoming as mycorrhizal as the various and abundant fungi we live among as we discover interconnections between contemplative and reflective work and the ecology of learning. And we are coming to realize that the creation of contemplative and reflective space holds promise to strengthen both our individual and collective capacity for difficult and effective work in the study of sustainability.

The great work we need to do seems to require the telling of our own version of Thomas Berry's great story. Our experiences in our learning community bear witness to Berry's plea to recognize that "...the universe is a communion of subjects, not a collection of objects" (Berry, 2002, p. 28) and to understand the relationship between the stories we tell and the world we inhabit: "It's all a question of story. We are in trouble just now because we do not have a good story. We are in between stories. The old story, the account of how we fit into it, is no longer effective. Yet we have not learned the new story" (Berry, 1988, p. 10). What follows is a story of many stories about learning a new story.

## **Part 1: Dimensions of Sustainability Education**

### *Sustainability as Adaptive Challenge*

The study of humanity's social and ecological problems has been historically housed in departments and programs focused on natural resources and the environment, as well as in schools of public health. Beginning in the 1990s, sustainability emerged as a new field, reframing and enlarging many environmental studies programs. Campuses across the country established sustainability task forces and created offices of sustainability. Furthermore, almost 700 college and university presidents have signed the American College and University Presidents' Climate Commitment to reduce greenhouse gas emissions and strengthen sustainability practices across all aspects of campus life. Sustainable practices have also gained a significant toehold in professional and technical

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<sup>1</sup> The Curriculum for the Bioregion Initiative is a project based on the recognition that higher education has a key role to play in preparing learners for civic engagement in a world where the complex issues of sustainability - environmental quality, community health, wellbeing, and social and environmental justice- are paramount. Involving colleges and universities throughout the State of Washington, Curriculum for the Bioregion engages faculty in embedding sustainability concepts and place-based learning in a wide array of undergraduate courses. Teachers in over 50 disciplines are reinventing existing courses and creating new ones that involve students with the issues facing the bioregion and with those people and organizations working on solutions. Curriculum for the Bioregion website: <http://bioregion.evergreen.edu>.

education, in colleges of architecture, business, engineering, interior design, and regional planning.

While these activities represent a new recognition of the need to reinvent how we feed and clothe ourselves, make and build things, and travel from place to place, sustainability is typically cast as a set of practical problems for which there are technical solutions. The message to students is often one of trimming our excesses or reining in our wasteful practices through recycling and energy-saving light bulbs. While technology and innovation are necessary to shaping our common future, we also must recognize that addressing global sustainability issues such as climate change, world hunger, the spread of infectious disease, gross inequalities among peoples, and degrading ocean ecosystems requires a deeper understanding and more systemic solutions.

Ronald Heifetz (2006) calls such daunting issues “adaptive challenges”: problems so complex and so continuously evolving that they cannot be solved with current knowledge or technical expertise. They require new perspectives and knowledge, and most importantly, collaboration that results from the bringing together of diverse bodies of knowledge and expertise. Decades earlier, the economist E.F. Schumacher (1977) called such problems “divergent problems,” meaning that the search for answers will never converge, in rational steps, to a single convergent solution; rather, these human predicaments are so challenging that the unending search for diverse strategies and attempts at solutions requires nothing less than major changes in cultural values and practices. In other words, the problems faced by humanity today may only be resolved by new mental models and behaviors that create ecologically healthy, socially just, and economically sustainable communities. Most importantly, this calls for an enhanced sense of moral purpose and long-term commitment to work toward a world on a dramatically different trajectory than what we are on today. This commitment will need to happen at both the individual level and to scale up to build new structures and ways of being that can maintain these changes over time.

Thus, sustainability education, and indeed all of education in the 21<sup>st</sup> century needs to become much more capacious—to help citizens everywhere reinvent how we go about living in the world and, fundamentally, how we *think* about the world we live in. As Daniel Sherman asserts, “Sustainability must become a pedagogical big idea, capable of complementing and connecting avenues of inquiry across the academic disciplines that organize and prioritize teaching and learning on campus” (Sherman, 2008, p. 188).

As our first Whidbey Institute meeting concluded, we were in consensus that our educational systems urgently need new curricular arrangements and new pedagogies that enable students to understand and become motivated to work on these issues without feeling cognitively or emotionally overwhelmed – or both. “We need to develop students’ capacity to sustain focused commitment, resilience, and a deepened competence over time to face and address these challenges. In short, we must strengthen the fiber of hearts and souls” (MacGregor and Parks, 2009, p. 2).

## *Sustainability as a Concept*

Sustainability is considered an adaptive challenge in part because the concept has broadened and deepened over the past twenty years. The Brundtland Report, *Our Common Future* (World Commission on Environment and Development, 1987), defined sustainable development in terms of the need to balance economic development with the need to conserve resources for future generations. Many environmentalists rejected this concept, arguing that the phrase “sustainable development” was an oxymoron. They preferred the term “sustainability,” although they limited it mostly to ecological sustainability. Today, the concept of sustainability is seen in broader terms than either sustainable development or ecological sustainability, and includes community, organizational, cultural, economic, personal and social sustainability. But because these different types of sustainability are often in tension with each other, it is important to ask “*What exactly are we trying to sustain and why?*” and to acknowledge that our fears about our own human mortality resides inside this question. Moreover, these types of sustainability are not equal in importance because all human life and activity ultimately depend on the sustainability of the earth’s systems. As Thomas Berry said “We have no existence except within the earth” (Berry, 1988, p. 195).

Time and space are other important dimensions to consider. What time frames and geographic areas are relevant for sustainability? Although the Brundtland Report discussed the need to conserve resources so that future generations can enjoy the same opportunities as we do, few economic decisions take account of this. Favoring short-term, technical solutions, most economic development fails to consider our responsibility to ensure that our children and grandchildren inherit a livable planet and ignores the ethical imperative for inter-generational equity. In contrast, some indigenous cultures consider the impacts of their decisions on the seventh generation very seriously. The Bemidji Statement on Seventh Generation Guardianship, prepared by the Indigenous Environmental Network, states that “The first mandate... is to ensure that our decision-making is guided by consideration of the welfare and well being of the seventh generation to come.” Similarly, spatial framing is important. Not only do we need to “think globally and act locally” we need to “think locally and act globally.” The capacities to think and act globally and locally, and negotiate the inevitable tensions that arise between global and local, are essential because local actions have global impacts and global actions have local impacts.

These dimensions reveal that ideas about sustainability are socially-constructed. Sustainability exists only as a function of how we choose to think about it. For instance, in our classrooms, as in our culture, there is a natural tendency to think of sustainability as a fixed, unchanging state that can be attained at some point in the future -- a goal that human societies should aspire to achieve. But is this view always helpful? Does it lead to seeing sustainability as an adaptive challenge or instead, something that can be realized through technological innovation alone? Does it lead to capacious thinking or a narrow-minded approach? John Robinson (2004) has argued it is helpful to see sustainability as an emergent process rather than a fixed state, taking into account the systemic and complex

challenges we face and engaging people and communities in the search for resilient solutions in new and exciting ways.<sup>2</sup> Perhaps more importantly, it allows students to see sustainability as an unfolding path full of possibility and potential. As our colleague Maureen Ryan has commented, “Critically it shows [students] that they have a personal role to play, and that the practice of engagement is how solutions emerge – this makes the struggling worth it and the payoffs tangible on a short-term scale.”<sup>3</sup>

But perhaps most challenging concepts of sustainability are too often explored in the context of the historically dominant Western cultures that now have become a global capitalized set of beliefs and values, including the emphasis on progress, reason, competition, individualism, and materialism. These tacit, and often unconscious, collective understandings profoundly influence how we treat the earth and how we treat each other, and perhaps most devastatingly, how we view our own capacities to contribute to the creation of a better world. Moreover, they are often antithetical to sustainability. Gregory Bateson foresaw that belief in the rationality of human reason and valuing *self*-consciousness as the highest form of consciousness could prove toxic and potentially lethal to the vitality of ecological systems of which humans are often unconscious. For example, how can we truly sustain and conserve the earth and its resources in a global consumption-based economy? How can we sustain and nurture human relationships in a competitive “dog-eat-dog” world? And how can we work for the common good in a culture that fosters and rewards individualism and independence? As discussed in the preceding section, the problems faced by humanity today may only be resolved by new mental models that are narrated by new stories. Or perhaps we might reimagine the old stories so that the societally admired value of individualism might become the recognition of the power of unique contributions of individuals towards common shared interests and the concept of self-interest as a shared self-interest in a living world.

### *The Urgent Nature of Sustainability Issues*

*Such questions would have had little meaning to generations prior to, say, 1950 when nuclear annihilation became possible. Other than a collision between Earth and a large meteor there was no conceivable way that civilization everywhere could have been radically degraded or terminated. But now any well-informed high school student could make a long list of ways in which humankind could cause its own demise that ranges from whimpers to bangs.*

*David Orr, 2004, pp. 57-58*

Sustainability challenges are not only dauntingly complex and continuously evolving. They also urgently require attention and concerted action. In the headlines, the litany of crises is all too familiar. Basic human needs are not being met for at least one third of the six billion

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<sup>2</sup> For a more extended discussion of spatial and temporal scales, see Gunderson and Holling’s *Panarchy* (2002) and Brand’s *The Clock of the Long Now* (1999).

<sup>3</sup> Personal communication, Maureen Ryan, Western Washington University to Marie Eaton, Western Washington University, July 2012.

people on the planet—and there will likely be nine billion people a generation from now. We are using up the earth’s non-renewable resources (fossil fuels, ores, and metals) at rapidly expanding rates. We are putting chemicals into the environment without fully understanding their effects on living systems or their ability to safely decompose. Natural systems are stressed or changed by human activity faster they can naturally recover; indeed, so many ecosystems are deteriorating or being altogether lost that Earth’s flora and fauna are headed for what experts term a “mass extinction.”<sup>4</sup> Climate disruption spawned by global warming exacerbates many of these problems. Meanwhile, as the global ecological fabric wears thinner, tensions over resources, food, or water beget or intensify political ones. As Canadian naturalist John Livingston has observed, “We dart about, stamping at tiny smoulders [sic] on the carpet, rushing from hot spot to hot spot, when all the while the roof is racing to a firestorm and the walls are creaking toward collapse” (1982, p. 13).

Paradoxically, while higher education curricula need to highlight these challenges, understanding them requires us (faculty and students alike) to face our fear, anxiety, uncertainty, grief, and even the recognition of mortality – ours, that of other species, and perhaps of planet Earth as we've known it. Deeper study also requires us (at least some of us in the developed world) to look in the mirror --to recognize that our collective values and practices are largely responsible for the sustainability challenges with which we must now deal. Ethnocentrism as well as anthropocentrism and their resultant behaviors have brought us to this place.

As we try to tackle these complex issues and face our own complicity, those of us in faculty roles also must negotiate increasing pressures to map the values of the consumer society on the curriculum. Increasingly, the stated purpose of higher education in today’s world is to get a job and earn more money, perhaps in response to the very real fact that education no longer guarantees an improved standard of living. As the contributors to “Higher Education on Its Knees” (Ty, 2011) note, these goals are very different than learning to live better *in* the world *for* the world.<sup>5</sup>

To be sure, gaining understanding of any global problem and its root causes is hard work. Frequently, the more we learn about these difficult issues, the harder they are for us and our students to negotiate. As our fundamental assumptions about the future of the planet are challenged, we are often left with feelings that global problems and the pace of change are unpredictable, unsafe, and beyond our personal control, and face that we may

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<sup>4</sup> Biologists consider this extinction event to be the sixth such massive loss of biodiversity in Earth’s history but the first one to be caused by human activities; this is further described in Leakey and Lewin’s *The Sixth Extinction* (1996); E. O. Wilson’s *The Future of Life* (2002); Chapin et al.’s “Consequences of Changing Biodiversity” (2000).

<sup>5</sup> For example, the values and perspectives which seem to guide the world of global-consumption might not be the values and perspectives we hope to develop in a liberal arts education, as Gert Biesta asks in his article, “How Useful Should the University Be? The Rise of the Global University and the Crisis in Higher Education” (Biesta, 2011).

be called upon to shift our own personal dreams and aspirations for a 'better life.' As we ask students to witness and deal with these feelings, emotions of frustration, grief, and despair regularly come to the surface. How, then, do we acknowledge students' very real emotions as they study these issues? Also, how do we effectively invite and encourage them to make a constructive difference in the world? As Maureen Ryan asks (2012), how can we help students cultivate empathy, accept failures (in ourselves and in others) and try again, exploring the wild edges, and learning to live with these contradictions as we work towards change?<sup>6</sup>

One way that we can encourage students in sustainability studies is to point to the countless individuals, communities and organizations that accept this uncertainty and work anyway towards new connections and the work of finding solutions. Although many solutions are simple technical fixes, there are many others that recognize the complexity and inter-connections of global problems and try to address their root causes. The rise of constructivist social movements that seek to move from a *suicide* economy driven by the fuel of perpetual growth (Korten, 2002) to build a *living* set of interconnected systems, such as various food movements, the Business Alliance for Local Living Economies (BALLE), Eco-Villages, Transition Towns, and Sustainable Communities (such as Sustainable Seattle, Sustainable Connections Bellingham, and Sustainable Milwaukee, to name a few) provide useful examples. Rather than dedicating their time and energy opposing the status quo, these new movements work on positive solutions at a systemic level. Other examples include the emerging fields of professional practice of ecological economics, biomimicry, life cycle analysis, sustainable building design, green chemistry, and the interactive arts movement<sup>7</sup>, which seek to bring diverse groups together through shared curiosity and discovery in engaging works of art that help citizens reimagine sharing civic spaces with each other and with the other species that inhabit our planet.

Much of this constructivist work is highly collaborative. It brings together unlikely partners who want to resolve common problems. Moreover, much of this work is happening at the margins of, or outside, established social and economic institutions. (In fact, as Neferti Tardiari in *Things Fall Away* (2011) argues, the very survival of those historically dominated by Western values has been based in collaborative work with a focus on the positive.) Downplayed or ignored by the mainstream academy and rarely featured in the mass media, there are already many success stories to draw on. Faculty highlighting this type of endeavor have found work by Paul Hawken (1994), Andres Edwards (2010), Jay Inslee (2008), Brian Walker and David Salt (2006), Wangari Maathai (2010), Stewart Brand (1999), Ted Bernard (2010), Hazel Henderson (2006) and Fran Korten, who created The Positive Future's Network's *YES! Magazine*, especially relevant. These and other publications emphasize creative solutions to sustainability challenges. By

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<sup>6</sup> Personal communication, Maureen Ryan from Fairhaven College, Western Washington University to Marie Eaton, Fairhaven College, Western Washington University.

<sup>7</sup> For example, the Multispecies Salon brings artists and scientists together to give a visual presence to creatures that thrive in the shadows of human worlds, such as parasites, weeds, and laboratory animals, as well as endangered species fail to flourish in the built landscape. See <http://multispecies.wix.com/multispecies>.

highlighting positive examples in a variety of social sectors, including civil society, business and commerce, education and government, they inspire students and provide sources of hope, motivation to act, and resolve.

### *Sustainability as Multiple Ways of Learning and Knowing*

Addressing these dimensions of sustainability requires a kind of teaching and learning that reaches beyond the norms of most undergraduate curricula. Sustainability studies are often interdisciplinary or present interdisciplinary dimensions to issues, often moving beyond campus boundaries into community-based research and community projects.

Sustainability education not only asks us and our students to understand new concepts and think through complex problems, but also to challenge our taken-for-granted assumptions and worldviews regarding our cultural and political systems. We are pressed to examine what it means to live responsibly in our neighborhoods and workplaces. Sustainability education requires nothing less than a larger pedagogy—one that sees learning as not only a cognitive endeavor, but also a somatic, affective, and moral one. Because of the considerable research being done on diverse modes of learning, the following are intended merely to introduce these important multiple ways of learning and knowing.<sup>8</sup> We believe that sustainability education must include:

**COGNITIVE** because the rational-empirical approach to knowledge, which involves calculation, explanation and logical analysis, and the sensory, characterized by observation and measurement, provides us tools for understanding and analyzing the complex historical, cultural, and socio-political roots of sustainability problems which need to be understood in order to work on solutions;

**SOMATIC** because the rational-empirical approach, for all its strengths, is based on abstraction. The body is a perception, not a concept. Bringing awareness to the body restores an awareness of the sense experiences humans share with all other life by virtue of sharing this planet. The body-mind split that characterized the binary rationality of modernity now characterizes the diseases of individuals and the planet (e.g., PTSD, ADHD, nature-deficit disorder, and the globalization of prescription drug abuse including toxic additives related to the manufacture of food, clothing and shelter). Restoring the health of both our planet and our bodies requires the cultivation of a mindful relationship with the vibrancy of matter. Beyond a certain cognitive imperialism, language itself can model the

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<sup>8</sup> Although Howard Gardner's *Frames of Mind: The Theory of Multiple Intelligences* (1983) and Carol Gilligan's *In a Different Voice: Psychological Theory and Women's Development* (1982) popularized the idea of multiple intelligences, the rise of a neurological worldview has contributed to a vast and diverse literature that demonstrates the multiplicity of approaches to understanding multiple intelligences. A few select examples include Antonio Damasio's *Descartes' Error: Emotion, Reason and the Human Brain* (1994); Don Four Arrows, Greg Cajete and Jongmin Johgmin's *Critical Neurophilosophy and Indigenous Wisdom* (2009); Elizabeth Wilson's *Psychosomatic: Feminism and the Neurological Body* (2004); David Brook's *The Social Animal* (2011); and B. Alan Wallace and Brian Hodel's *Contemplative Science: Where Buddhism and Neuroscience Converge* (2007).

process of enactive signification. If from an evolutionary perspective language is an internalization of movement, then when, for whom, and at what cost is it possible to speak of a planetary and neuroplastic interdependency of body-minds?<sup>9</sup> For example, what actions won't be engaged in if "global warming" is not articulated in a national energy policy? Put differently, what actions might "climate change" bring forth? Indeed, the recognition of contemplative mind and its affects often begins with the embodiment of the mind through practices such as breath awareness and other forms of sensory-based somatic perception. As expressed by Jason Wirth, "You cannot awaken the mind by just using the mind. Brain zen is not real Zen. One needs, in addition to mental cultivation, serious somatic training."<sup>10</sup>

AFFECTIVE because the beauty and mysteries of our planet and its diverse life forms can inspire feelings of deep awe, wonder, comfort, and gratitude, all of which sow seeds of empathy and responsibility. At the same time, the daunting nature of world problems often leads to resistance and denial or feelings of despair and hopelessness. Students come to this area of study with a complex mix of optimism and skepticism; they have energy to dig in and engage, but also can become overwhelmed and debilitated by the cognitive and emotional complexity of the world's problems. As the exploration of sustainability concepts paired with an honest look at the realities of today's world builds through a course or program, this mix of contradictory responses continues to shift and percolate. A fully developed sustainability curriculum must give attention to these affective components—helping students appreciate the life-giving biosphere and its remarkable wonders, as well as helping students develop and sustain commitment in face of daunting challenges.

MORAL because we are called to understand that these issues are not simply technological or economic—they present enormous moral challenges and choices. This dimension of sustainability learning is not only urgent, but should be the culmination of our cognitive, somatic, and affective learning. As Kathleen Dean Moore and Michael Nelson put it in their introduction to *Moral Ground: Ethical Action for a Planet in Peril*, "...saving a fully thriving future will require not just good science and new technology but also the greatest exercise of the moral imagination that the world has ever seen" (Moore and Nelson, 2010, xix). The great 20<sup>th</sup> century educational philosophers, from Meiklejohn (1927) and Dewey (1944) to Hutchins (1953) all argued that the core purpose of education was to prepare students for engagement in democracy. They believed that education, especially in the college years, should emphasize a "moral curriculum," but not in the sense of moralizing or touting a particular ideology. Rather, they believed that the curriculum should engage students with

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<sup>9</sup> For critical perspectives on the dominance of abstracted literacy see Benjamin Bennett's *The Dark Side of Literacy* (2008); Harold Roth's *Against Cognitive Imperialism* (2008), Ivan Illich's *ABC: The Alphabetization of the Popular Mind* (1989 and 1988); and Parker Palmer, Arthur Zajonc, Megan Scribner and Mark Nepo's, *The Heart of Higher Education* (2010).

<sup>10</sup> Personal communication, Jason Wirth from Seattle University to Sarah Williams at The Evergreen State College, May 2011. Don Hanlon Johnson's work provides one chronicle of attempts by scholar-practitioners to cultivate intellectual with serious somatic training: <http://www.donhanlonjohnson.com/publishing.html>

great thinkers, great ideas, and great questions—and then challenge students to develop their capacities for moral reasoning, to form their own synthesis, essentially to make up their own minds. They felt that students would not develop a sense of responsibility and moral agency unless we, their faculty, created occasions for examining what citizenship means—and what it requires.

In this century, the imperative for moral learning is much greater and more urgent. A moral curriculum must involve students in understanding not only what it means to live responsibly in a democracy but also what it means to live responsibly on Earth and what collective efforts are needed to prevent environmental and social catastrophes. As Desmond Tutu contends, “We are called to honor our duties of justice, to prevent the enormities of climate change, as the price of the lifestyles of the privileged is paid by millions of poor people, in the loss of their livelihoods and their lives. We are called to honor our duties of compassion, to prevent the suffering of millions of innocent people, especially the hungry children” (2010, xiii).

Time spent in contemplative and reflective activities, creating the pause in cognitive work, allows students to integrate these multiple ways of learning and knowing, to understand the problems we face more deeply, to hold them in our hearts as well as our minds, and to imagine different ways of being and acting in the world.

## **Part 2: Reflection and Contemplation as Academic Practices**

In our discussions together, we explored the distinctions between *reflective* and *contemplative* practices, examining their complementarities and differences, and at first, tried to define exactly what we mean by these terms. However, as our discussions progressed, we realized that these terms and practices have a complicated history. In our group and also in a growing body of others’ literature, the terms are often used interchangeably. Yet, depending on writers’ intellectual, religious, and spiritual histories as well as their places of employment and publication, these terms also have different resonances and may vary greatly. For example, the Center for Contemplative Mind in Society has created a “tree of contemplative practices”<sup>11</sup> that renders as organic a plethora of reflective and contemplative practices and traditions. However, for many these traditions there are systemized progressions of practice that are rooted in distinct histories transmitted through specific lineages. Perhaps it is precisely this diversity that might enable an integration of what Christopher Bamford identifies as the central tension of the western spiritual tradition: “the desire to know and the desire to love” (Bamford, 2003, back jacket). The tension between these two motives is deeply embedded within the liberal arts tradition. Although the *quadrivium* included mathematics, it now is arguably *not* oxymoronic to speak of the need to incorporate the liberal arts into current STEM—

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<sup>11</sup> <http://www.contemplativemind.org/practices/tree.html>

science, technology, engineering, math—initiatives.<sup>12</sup> While the need for students to engage with science constitutes a national education priority, the need for science to engage *humanly* constitutes now curious sidebars, such as Barbara McClintock’s “feeling for the organism,” Craig Holdrege’s enactment of Goethe’s “delicate empiricism,” or Donna Haraway’s inspiration of “feminist science studies.”<sup>13</sup> If a cultivation of the ability to discern and articulate both the objectivity of knowing and intersubjectivity of loving was part of a western cultural wisdom tradition that has largely disappeared from the curriculum of higher education, an emergent contemplative education movement is relocating this tension at the center—as a purpose—of higher education.<sup>14</sup>

Although we did not—and perhaps should not—agree on precise definitional language, we share a general understanding of the orientations commonly referred to as reflection and contemplation. Reflection generally connotes acts of cognition. Reflection often involves second thoughts or thinking that draws on memory, reinforces associations and may assist moving initial thoughts, which may be fleeting, into more enduring meaning and understanding. The main objective of *reflective* practice is to ensure a more accurate and relevant understanding of a situation and to provide effective, relevant action, which will facilitate the occurrence of more desired and effective outcomes. Reflective practice provides the pause to explore and surface beliefs, values, and interpretations of reality, and requires a particular kind of focused attention. Reflective practice is widely accepted in the academy, codified in practice in many professional disciplines and pedagogical approaches (education, engineering, leadership studies, service learning) and in the assessment and evaluation systems in many alternative colleges.<sup>15</sup>

*Contemplative* practice, less common in the modern academy, connotes perceptual rather than conceptual activity. Contemplative practice is often experienced as opening a space for the non-conceptual, even as one is grounded within the space occupied by one’s body. Silence, openness, and the capacity to be drawn by what some would call the divine, others would call “the wild,” and still others hope to measure as the neurophenomenological, point at the contemplative mind. Contemplation is not about thinking, but about

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<sup>12</sup>See Donna Gordon Blankinship’s “Gentle Liberal Arts Push-back Blooming in Washington,” (<http://www.thenewstribune.com/2012/07/19/v-lite/2220186/gentle-liberal-arts-push-back.html>) and Sandi Everlove and Michael Zimmerman’s “Don’t Pit Math and Science Education Against the Liberal Arts,”

[http://seattletimes.com/html/opinion/2019041414\\_guesteverlovezimmermanxml.html?cmpid=2628](http://seattletimes.com/html/opinion/2019041414_guesteverlovezimmermanxml.html?cmpid=2628)

<sup>13</sup> See Evelyn Fox Keller’s *A Feeling for the Organism: The Life and Work of Barbara McClintock* (1984). For contemporary enactments of “delicate empiricism” see links to publications at Holdrege’s The Nature Institute (<http://natureinstitute.org/nature/index.htm>) and for feminist science studies see Haraway’s *The Donna Haraway Reader* (2004) and *The Postcolonial Science and Technology Studies Reader* (2011) edited by Sandra Harding.

<sup>14</sup> See Parker Palmer’s chapter, “Beyond the Divided Academic Life” in Palmer et al.’s *The Heart of Higher Education* (2010) for a deeper discussion of these ideas.

<sup>15</sup> Many of the schools in CIEL - The Consortium of Innovative Environments for Learning (CIELearn.org) share narrative reflection as an assessment and evaluation tool.

allowing for understanding and knowledge, for spontaneous or intuitive insight, that doesn't come from thinking, and is characterized by the mind turned to awareness itself.

As we discussed our varied definitions of and approaches to reflective and contemplative approaches, we recognized that the more compelling questions to ask are, "What is going on when we educate to cultivate the contemplative and reflective minds? How does this differ from education for the rational mind? Are they different minds made so by the cultivation of mindfulness itself?" We began to explore a set of capacities – the ability to pause, to pay close attention to something, to listen, and to remain silent as well as the capacity for self-observation—to notice and be present with one's state of mind, body and emotion—and to deepen curiosity and openness to intuitive knowing.

Reflective ways of knowing have an extensive history in educational settings. However, contemplative practices are a different matter and have had a complicated relationship with the academy, particularly as academic institutions have become more secular over time. Indeed, Mary Rose O'Reilley (1998) has acknowledged that teaching contemplative practices is often seen as radical and subversive, and in the scientific world often criticized as "not rigorous." And as one of our "Sustainability and Contemplative Practice" community members, Patricia Killen, reminded our group, although contemplative and other related ways of knowing once were fundamental to the acquisition of knowledge and wisdom in western medieval universities, by the 14<sup>th</sup> century these practices were confined to monastic education. At this time, the education of a lay population focused on practices to enhance secularized ways of knowing, learning to read and write, but no longer listening for the "voice of God." Objective ways of knowing were given primacy and one way of understanding objectivity was to juxtapose it with its opposite. For clerics, the love of learning was fused with the love of God, but for the lay population, this fusion with God no longer informed learning. With the rise of empiricism, scientific inquiry and rational thought, the two were pulled apart. While this essay does not provide the opportunity to trace the history of the various and varied movements of thought that continue to make contemplative knowing suspect within some circles and celebrated in others, a critical turning point well documented is the rise of the secular university from the Catholic church, its handmaiden.<sup>16</sup>

One can perhaps most poignantly see the lasting effect of this legacy in patterns of growth and finance in secularized, publicly funded institutions. For example, while disciplines within the humanities and ethnic studies have been cut back, centers that promise to further objectify learning through the use of technology, new media, and computer-driven innovation are deemed valuable despite widespread budget shortfalls. Zombie capitalism and incorporated democracy are more than savvy titles of books; they name a kind of inverted totalitarianism that we all recognize. With this recognition might we be transitioning from education aimed at getting a job and making money to education that is about learning how to live better? Or, as one astute reader of an earlier draft of this

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<sup>16</sup> John Leclercq's *The Love of Learning and the Desire for God* (1982) and Ivan Illich's *In the Vineyard of the Text* and *ABC: The Alphabetization of the Popular Mind* (1989 and 1988) are starting places for understanding this transition.

text put it, this very different goal of education could prove that learning to live better *in* the world might actually be better *for* the world.<sup>17</sup>

The ancient and complex nature of contemplative practices have largely developed outside academia and continue to evolve among religious traditions across the world. They have been taken to a depth that most people in the Western world are not only not aware of, but often to a large extent do not appreciate. In fact, only recently has the American Academy of Religion mounted a new forum for the investigation of contemplative practice and experience, including “theoretical and interpretive issues, the application of contemplative practice to academic life and university culture, and the contributions of “contemplative pedagogy” to teaching and learning.”<sup>18</sup> In April, 2012, The Mind and Life Institute hosted their inaugural International Symposia for Contemplative Studies to bring together researchers in the fields of “contemplative basic science, contemplative clinical science, contemplative philosophy and humanities, contemplative education” in order to advance “understanding of the human mind and how training the mind through the use of contemplative practices can lead to a reduction in suffering, enhanced health and cognitive/emotional functioning, greater happiness, and increased social harmony.”<sup>19</sup>

Today our relationship to *thinking* in academia is fairly straightforward: we all want to develop good student thinking, especially “critical thinking” and “higher order” thinking. Some of us value, encourage, and reward “creative thinking.” (Whether we are skilled at developing these capacities in students is another matter!) Our relationship to *contemplative practices* is much less clear, in that we (and most of our colleagues) typically associate such practices with religious traditions or forms of prayer. Further complicating matters, many of us who have interests in contemplative practice in the classroom also have a contemplative practice in our personal lives. We often turned to practices that draw upon Buddhist, Quaker, Sufi, or other religious traditions because we did not find them in our own secularized education or in our non-contemplative religious traditions. Perhaps for some of us, contemplation has become critical for overcoming our learned speechlessness in regard to our traumatized individual and collective religious histories. Because contemplative practices have typically been excluded from modern public educational life in America, some of us now find ourselves trying to reassemble what was pulled apart, the rational objective mind and contemplative awareness. For those who teach within faith based educational institutions, our attempts to reassemble may be experienced as a form of colonization.

In recent decades, there has been an emerging and more publicly acknowledged interest in the use of contemplative practices, partly as an antidote to the pace, fragmentation, and superficiality of modern life, and partly to explore new modes of being in relation to oneself and the world. Additionally we recognize that many of the great leaps

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<sup>17</sup> Personal communication. Richard Scholtz to Marie Eaton, Fairhaven College, Western Washington University, May, 2011.

<sup>18</sup> [http://op3.aarweb.org/program\\_units/4d4792d9cc65220f3b0090f9](http://op3.aarweb.org/program_units/4d4792d9cc65220f3b0090f9)

<sup>19</sup> <http://contemplativeresearch.org/about>

in knowledge and cognitive understanding have happened in contemplative and reflective spaces. So we must include spaces for the wild mind and intuitive leaps. Organizations such as the Association for Contemplative Mind in Society, the Mind and Life Institute, the Lindisfarne Association, Esalen, Naropa University, UCLA's Center for Spirituality in Higher Education, the Open Society Institute, the Omega Institute, the Garrison Institute and the Waldorf School/Anthroposophic movement all provide resources. And more recently, in response to the tremendous interest of college and university teachers, the Association for Contemplative Mind in Society has spawned a new initiative and organization to serve college faculty, the Association for Contemplative Mind in Higher Education. This organization has created a home for college and university teachers to share ideas, approaches, questions, and resources. And there is an emerging literature that explores the role of contemplative practice in academic settings.<sup>20</sup> As a result, growing numbers of faculty members are engaging their students in reflective and contemplative practices in diverse settings and for diverse purposes. In the next section, we will describe several of the ways that we and our colleagues have been using reflection and contemplation in teaching settings that focus on sustainability.

### **Part 3: How do Reflective and Contemplative Practices Enhance Sustainability Education?**

Weaving reflection and contemplation into sustainability education helps build the capacities described in the previous section. These pedagogies help students form and deepen positive connections to the living world; navigate the suffering, grief, despair, and fear that arises when these issues are studied deeply; build a capacity for discernment; listen deeply to and engage multiple perspectives; and make a creative response with purposeful action. They also begin to foster the attitudes and skills that will help them stay engaged for the long term with whatever forms of service or civic commitment they choose. This section will explore each of these capacities and the impacts reflective and contemplative pedagogies provide in fostering them.

#### *Deepening Connections*

In order to make a commitment to protect something, we have to care deeply about it. Research demonstrates that many environmental professionals were propelled into their commitments by "significant life experiences" in childhood associated with extended time in the natural world (Tanner, 1980; Chawla, 1998; 1999, 2001; Corcoran, 1999; Sward, 1999). More recently, the work of researchers at Cornell University has revealed that

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<sup>20</sup> See, for example, Graves and Brand's *Presence of Mind: Writing and the Domain Beyond the Cognitive* (1994); O'Reilly's *Radical Presence: Teaching as Contemplative Practice* (1998); The Center for Contemplative Mind in Society's *Contemplative Practices in Higher Education: A Handbook of Classroom Practices* (2008); Simmer-Brown and Grace's *Meditation and the Classroom: Contemplative Pedagogy for Religious Studies* (2011); and Miller and Hughes' *The Pen and the Bell* (2012).

among a broad array of citizens, those individuals with strong environmental values and regularly practicing environmentally responsible behaviors also report having experienced extensive, unscripted time in nature as children (Wells and Lekies, 2006).

This research raises questions for us as educators. When so many of our students have grown up playing indoors with few direct experiences of the natural world, how can we help them develop deep and caring relationships with other species and the ecosystems in which they live?<sup>21</sup> And, when so many spend their time in the virtual world of social networks and Twitter, how can we help them develop empathy and capacities of civic engagement in their real communities?

Many of us involved in sustainability education agree with Mitchell Thomashow's notion (2002) that we need to bring the biosphere home to students: that is, in order to make global problems more understandable and more meaningful to students, we should begin where students live. We should help students become more observant of their local surroundings and home communities—communities that are rich in natural and cultural history. Studying the local, and seeing ecological and social processes at work on a local scale, can provide students with foundational understandings with which to perceive issues on larger scales. We ought not just immerse students in the planet's many pressing problems, but also should build students' capacity for appreciation, awe, and wonder for the human and the "more-than-human" world around them. Study of the local should connect students more directly to the places—both the natural and social systems—in which they live and work. Often educators speak of giving learners "a sense of place." We agree, but we are convinced that we must go further, not only to provide students with an awareness of their surroundings, but also with a love of those surroundings—a personal investment in them—and a sense of responsibility and agency related to sustaining community wellbeing.<sup>22</sup>

One strategy for developing this affinity is reflective observation, in which students actively make meaning from their observations. Students at Antioch University Seattle's Center for Creative Change engage in reflective observation exercises in several courses. In one course, students are asked to observe a place – it can be an urban setting or a more natural one - and to consider how people interact with it and with each other. They are also asked to think about how human activity has affected the place and its long-term sustainability from a social and an environmental perspective. This exercise, called *Seeing Sustainability*, has generated reflective observations on restaurants and coffee shops, parks, schools, wilderness areas, hospitals, superstores, bodies of water and private homes. Given this diversity of settings, it's not surprising that students have reflected on many different sustainability issues. These include the sustainability benefits of ethnic and cultural diversity, the privatization of space and the need for public community spaces, social

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<sup>21</sup> See Richard Louv's book, *Last Child in the Woods: Saving our Children from Nature-Deficit Disorder* (2005) for a well documented discussion of how today's generation of children has been raised without meaningful contact with the natural world.

<sup>22</sup> One member of our learning community, Kurt Hoelting, took on this responsibility and agency through a very bioregional approach. Some of us have included his story in our curriculum: *The Circumference of Home: One Man's Year-long Quest for Radically Local Living* (2010).

justice, consumerism and its effects on the environment, corporate efforts on environmental protection, and a sense of awe and wonder at the natural world. Perhaps most importantly, these exercises nearly always result in an experience of affinity with the setting the students have observed. In a paper on this exercise one student wrote, “Observing the farmers’ market, I fell in love with the people, the place and the produce. The sight of a child in a red dress holding onto her mother’s hand for dear life, the smell of the flowers and the incredible variety of fruits, veggies and other foods – I felt dizzy and almost drunk with the experience of life itself.” Feelings like these engender the desire to look after and protect the setting and play an important role in fostering social engagement.

Reflective observation is also used extensively to deepen connections to the natural world. Undergraduate courses and programs that involve students in areas of study such as field natural history, environmental education, drawing from nature, or creative writing at The Evergreen State College help to deepen connections with the natural world. Jean MacGregor teaches workshops entitled “Don’t Just Do Something, Sit There,” to develop students’ capacity for observing the natural world and contemplation in the natural world. Depending on the particular academic program and its purposes, students engage in these activities to prepare to do field research, to develop their drawing or writing skills, or for more open-ended contemplative time. Often, these field observation experiences are tied to journal assignments that ask students to record observations, make maps or sketches, or engage in reflective writing.

Regardless of the specific academic purpose, MacGregor’s goal is to encourage and support students in stilling their bodies and minds to the degree that they can become *closer to nature*—on several levels. First, by learning to breathe quietly and sit absolutely still and unobtrusively in nature for extended periods of time, students discover that they can observe, at very close range, the actuality—not to mention the beauty and fascination—of animals going about their lives. For the first time, students report watching a spider spin an entire web, or ants move their colony, or a pair of birds feeding their nestlings, or a shrew shredding a mushroom in search of an insect meal. They often remark on how they became so engrossed in their observation that “time stood still”—or that they were surprised and delighted to make detailed discoveries all on their own. Second, through disciplined stillness, students discover their own acute powers of listening and observation, capacities they did not know they could cultivate. Third, for those students who work at honing these practices, patterns of ongoing curiosity and reflectiveness open up for them, and they consistently report a strengthened affinity and empathy for the more-than-human world.

## **“Don’t Just Do Something, Sit There” Suggestions for Sitting and Observing in Nature**

Jean MacGregor, The Evergreen State College

*On my way to conduct field research in the Kalahari Desert in 1975, I stopped in London and visited a Friends Meeting there. A small poster on a bulletin board in the Meetinghouse said, “Don’t Just Do Something, Sit There.” At the time, I was struck by this gentle invitation to worship, but within weeks, the phrase became my touchstone for developing the discipline and patience to become much more deeply immersed in field observation—as it has ever since. Here are some practices I have found useful.*

- 1. Find a place to which you can return with some frequency and get to know that place deeply, over time.** The place where you decide to develop your “sit there” skills need not be in the wilderness. It can be in your back yard or a city park, but find a place you can easily return to, so you can make repeated visits and get to know it over time. Choose a spot where you are inconspicuous but have a view; if you nestle yourself deep in the bushes, you may not see much. An edge between communities (a pond edge, a forest edge) is often rich in diverse life. Camouflage isn’t necessary but wearing darker clothing helps you blend into your surroundings. Find a place where you can sit comfortably. If needed, take something to sit on (a cushion or stool) so you can be comfortable for extended periods of time, a few minutes up to an hour or more.
- 2. Learn to become still enough** so living things around you are no longer alarmed or anxious that you have intruded. In a short period of time (usually about 20-30 minutes) birds and mammals will often resume going about their regular routines. Strive to be still in body and tranquil in mind.

### **Developing body stillness**

- Do some stretching before you set out.
- If your neck and shoulders are tense, rub or exercise them beforehand to help your muscles relax.
- Strive to sit in a balanced, a symmetrical position, one in which you can keep still for a while without straining one side of your body or the other.
- Practice breathing slowly and quietly enough so that a person sitting right next to you cannot hear your breathing. Practice “diaphragmatic breathing” to fill your lungs fully and then concentrate on making long exhalations. Sometimes, counting helps to establish a consistent breathing rhythm...count slowly to 6 as you inhale and count slowly to 8 or 10 as you exhale. Once you establish a rhythm, you will notice that you don’t need to continue counting.

### **Developing mind stillness**

To become deeply observant, it is important to quiet your mind and what is often called “roof brain chatter,” the busy thoughts that capture our attention. For centuries, different religious traditions across the world have honed meditation strategies that involve quieting the mind and focusing attention—attention to a question, attention to deep prayer, or attention that awaits the unconscious. These strategies are highly diverse, everything from repeating sayings or chants, to rocking back-and-forth, to repetitive dance movement. More recently, the teaching of biofeedback strategies or mindfulness strategies also suggest strategies for setting aside distracting thoughts and achieving a state of calm and repose. Quietening the mind is a skill that develops slowly. Do not be discouraged if it seems difficult at first. Start with a sitting period of just a few minutes and then see how much you can extend it. Stay with it. Observe the strategies that work for you, make note of them, and keep developing them. You will soon find that you can comfortably sit still for longer and longer periods of time.

- 3. Develop your sensory awareness:** As you practice sitting still for periods of time, also pay attention to all your senses and what they are taking in. Developing your senses as you sit in nature is not so much working at “turning them up” or honing them, but rather allowing them to come alive. Just pay attention and observe what is coming in.  
  
A note about observing animals: sometimes watching a bird or mammal intently (especially attempting to make direct eye contact) will frighten it. “Soft focus” watching or looking out beyond the animal will lessen the effect of signaling that you are challenging or intruding on the animal.
- 4. So what next?** These suggestions have been used in a number of classes, for different academic purposes, including natural history field observations, visual arts and creative writing assignments, and the development of various reflective and contemplative practices. I hope that these ideas will get you started with “sitting there” with respect to the assignment(s) that you have been given and that you will develop your own strategies as well.

Related to MacGregor's example of how students develop affinity for the natural world through reflective observation in natural settings, Susanne Fest, an instructor in an ecopsychology curriculum at Antioch University-Midwest, asks students to write autoethnographic<sup>23</sup> accounts of their experiences in and with nature, situating themselves in context, exploring how self and environment interconnect, creating what has been called a "dynamic in-betweenism." As part of an ecopsychology curriculum Fest's students engage in immersion experiences on farms where they learn permaculture, farming and skills of living with the land. The following excerpt is from a student's account of her experience tanning a deer hide. In it we see how the writer develops a dynamic relationship with the object of her activity, the deer hide, such that subject- object boundaries dissolve. This experience is followed by a deep sense of empathy and loving interconnectedness.

This week was hide tanning.

Enough said. Or now I understand what that means.

Fleshing, graining, membraining. The graining, the scraping, so intense, I thought my arms were going to fall off. Days, aching, the muscles. I did not think I could make it. It was a hard initiation of sorts: the pain of re-entering the material of the earth, of working her body. I was in so much pain. I wanted to quit, I wanted to stop, it was too much for my body, and I did end up getting some help. I was kept up half the night with my arms in pain, and my back pinching.

Then today, as I was shifting from scraping to braining- (where we fat soak and then wring, returning the elastin to the hide)- I realized that I was this skin. I had been feeling so disconnected from this skin- from this beautiful being- this deer. I was not able to be present with her and sing her praises, for I was in such discomfort. I realized that my body was echoing her body. Her skin was being scraped, being torn apart and worked. Similarly, I was being worked and remade- torn apart in the process, with only my body to work with. I was dying, I was dead. I suddenly could see my skin as this hide, my death so close. I had been not seeing my life or my death, but now it became clear- a relief coming up from the undercurrent pool, I felt the drying hide- my hide- returning to the earth- my personality gone, stripped away- I let go. And in that moment my discomfort shifted, my depression, did not lift but rather lightened and formed resolve and strength, and created a foundation for this work; a frame with which to see and experience this process. And now I could feel the life of this skin, and encourage her to jump up and live again, in a new form that I was midwifing. As I was wringing and braining, and adding the fluidity back to this skin, she was finding her running living spirit again. As this happened, I was finding my running spirit again, my jumping body, my agile body. I was working my muscles fluidly, now that the scraping was passed and as I was wringing and getting to use more of my body. We were preparing to jump and run again.

I prayed for the sun as it set to ignite her, as I hung her hide to dry, neck towards the setting sun, out in the warm winds, in the fields she once ran in fast, hooves deep in the ground, light to the skin, agile in heart and gaze alert.

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<sup>23</sup> For a discussion the rationale and practices associated with autoethnography see Ellis et al. *Autoethnography: An Overview* (2011).

Homesteading and primitive skills is intense work. It is so physical and labor intensive. Sometimes I want to retreat to my city life, where I can just go out and purchase instead of make. But there is a unique depth of experience available where I take the time to find or make the tools to create something, and then use my own body to make it.

I am finding a new relationship with energy as my body. Now I see my body as being the source of creation and energy, nothing else. I walk, I carry, and stretch, and create with my muscles. I am energy directed to create and survive: there is nothing between creation and myself, no assistance from the outside-it is only my direct relation with this earth. It is overwhelming sometimes, and really hard, and so time consuming, but it is also strengthening and empowering, and crashes through my sleeping brain, and calls me to-awake! [Student, Antioch University]

Although these examples focus on observations from out-of-classroom experiences, this kind of reflection about experiential learning also stimulates a deeper insight into assigned texts. As one student in an Evergreen program noted in a self-evaluation: "I enjoyed all of the texts this year and found them to strike places very deep within me. Most importantly, I developed a way of relating to literature by becoming aware of my thoughts, emotions, and body as I read. Reading has become much like a contemplative practice." Another student in the same program wrote passionately about how his chosen service learning project helped him wrestle with the impact of technology.

The literature and consciousness component of this program played a huge role in my studies at Evergreen...It was Ulin's words that grabbed me and inspired me to put forth my greatest effort in my community-based learning project with Books to Prisoners. Some suggest, like Ulin's 15-year-old son, that in this world of technology with everything at high speed and at a touch of our finger tips, that literature is dead. I say that literature is not dead, but we would be dead without literature. Literature is crucial to the survival, especially of an inmate. In a book you are set free from the binds and limitations of this world...Sometimes inmates just want human interaction, to know that someone out there still cares. Through answering letters to inmates and sharing the love of literature the dehumanizing effects of being incarcerated are offset. The books and letters allow inmates to feel connected and a part of this society. [Student, The Evergreen State College ]

In this student's voice, the contemplative force often silenced by the voice of reason can be heard.

### *Navigating Suffering, Grief, Despair, and Fear*

Strong emotions are raised when we become more aware of urgent problems of crisis proportions; using contemplative and reflective strategies helps our students (and us) to negotiate the dual strands of the despair and hope that are part of teaching and learning about Earth devastation and what it means to "...live a moral life in a world of exquisite beauty that also suffers from multiple forms of social injustice and ecological degradation" as one of our group put it. These practices also may provide some counterbalance to what

many faculty in environmental studies have long referred to as “the Cassandra dilemma”<sup>24</sup> when they present the challenges of an uncertain or dark future to their students who either “don’t believe us” and resist learning or fall into the depths of despair without the resources to climb out.

This challenge is real. As Saskia Tait (2011) reported, in the 250 interviews she conducted with graduate students in international relations, 70% of the students reported that they felt so discouraged by the immensity of the problems facing the world that they were less inclined to pursue work in that field *after* they finished their programs than before. They acknowledged feeling tremendous responsibility, but also were overwhelmed. Saskia herself indicated that she was sustained in her work by her contemplative practice.<sup>25</sup>

In her large-lecture *Global Environmental Politics* course, University of Washington professor, Karen Litfin, feels compelled to help her students grapple with the fear, anger and despair that arise when they learn about the unfolding planetary crisis. In her pedagogical approach to the field of international relations, which she calls “Person/Planet Politics,” Karen encourages her students to continually ask, “Who am in relation to this?”

For instance, at the end of a two-week section on global climate change, Karen invites her students to relax deeply and to observe their emotions and bodily sensations as she invokes some of the political and ethical quandaries covered in the course. While students who wish to opt out of this 10-minute exercise are given permission to leave, very few do. During the guided meditation, Karen points out that humanity has embarked upon a planetary experiment, that we all will be living in the results of that experiment, and then asks them to consider who they are in relation to this changing world and to simply take note of all that arises.

The first time Karen offered this exercise, she was curious about its effectiveness and so conducted an anonymous online poll. All of the respondents, minus one, felt that they benefited and expressed gratitude for the respite from their harried lives. Fully a third of the students reported gaining “significant insights into my sense of self in a changing climate.” Even more gratifying were the ensuing personal responses. One student who had never spoken in class told Karen that he now knew that he wanted to be an environmental science primary school teacher. Another reported that he recalled early childhood memories of his parents’ village in Mexico and now understood that he wants to find a way of bridging that life with his urban life in Seattle.

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<sup>24</sup> For a more extensive discussion of the Cassandra dilemma, see Alan AtKisson’s *Believing Cassandra: An Optimist Looks at a Pessimist’s World* (1999).

<sup>25</sup> Personal communication, Saskia Tait, New Earth Institute, to Marie Eaton, Fairhaven College, Western Washington University, July 2011.

The urgency of these issues requires finding ways to nurture the practices of reflection and contemplation. Without that ability to step back and reflect on the process of learning and these connections, it's easy to become a leaf in the wind, pushed around without much autonomy or authority over our own behaviors and practices and to fall into numbness or despair. Paradoxically, inviting students to sit quietly with uncomfortable facts and emotions counters academic abstraction and often generates insight, resolve, hope and empowerment.<sup>26</sup>

### *Building Capacity for Discernment*

Understanding the complexity, scale and scope of these issues requires honing a particular kind of discernment. Classroom discussions about the challenging problems faced by our planet too easily devolve into a list of “shoulds” and urges toward simplistic actions that often don't encompass the multiple perspectives and the interrelated systems involved in the issues. As Wayne Muller said,

Presented with the intricate and delicate issues of poverty, public health, community well-being, and crime (or one might also add, environmental degradation), our impulse, born of weariness, is to rush headlong toward doing anything that will make the problem go away. Maybe then we can finally go home and get some rest. But without the essential nutrients of rest, wisdom, and delight embedded in the problem-solving process itself, the solution we patch together is likely to be an obstacle to genuine relief. Born of desperation, it often contains enough fundamental inaccuracy to guarantee an equally perplexing problem will emerge as soon as it is put into place. In the soil of the quick fix is the seed of a new problem, because our quiet wisdom is unavailable. (2000, p. 4)

Students don't easily accept this “*quiet wisdom*.” They are impatient for change, and as a result, faculty members teaching in the field of environmental degradation and sustainability typically face hard questions from their students: “What can we do about this?” or, more critically, “Why are we reading all these people who just write about the problem without doing anything about it?”

As students begin to connect the “big ideas,” systems, and concepts that underlie these problems, they also begin to negotiate the heroic cultural myth that we can ‘save the planet,’ understanding that our inability to recognize our limits and our propensity to exaggerate our abilities are what got us in trouble in the first place. Reflective and contemplative practice not only builds the capacity for discernment, but also the virtues required to deeply understand the challenges of environmental degradation: patience, humility, and discipline. These practices may also help students discover that thinking and writing about environmental degradation *is* a form of action and provides a counterweight

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<sup>26</sup> The correlates and consequences of contemplative practice, and the scientific evidence that meditation raises activity in *both* the sympathetic and parasympathetic nervous systems – hence heightened attention alongside heightened calm, were explored at the inaugural *2012 International Symposia for Contemplative Studies*. <http://contemplativeresearch.org>.

for the urge to chase the illusion of simple or straightforward answers, which typically leads either to being deeply disappointed or being profoundly duped.

Our creative capacity to develop more complex answers is often limited about *how* we think about a situation. The very ways we select, name and organize facts to tell the story about the problem, may short circuit our creative solution finding. Simple examination of the facts and data may develop analytical thinking and judgment, but also may close access to unexplored avenues. At the heart of reflective practice is inquiry -- question asking and asking reflective questions often helps us reexamine our own tightly held views. A powerful question may shift and spark creative thinking and generate a search for other answers, negotiations of meaning and dialogue, and perhaps lead to a new way to understand the stories that also may open up new ideas/solutions.

When teaching a course exploring the environmental and human impacts of the industrialized food system, Marie Eaton (2009), at Western Washington University's Fairhaven College, draws on strategic questioning models<sup>27</sup> as the basis for assignments that ask students to reflect on the following questions:

- How might I think about this situation (*a problem related to industrialized food production*) differently? What information do I not have, or what parameters influence this situation that I am not considering?
- What judgments and assumptions may block my ability to see this situation? Do I already hold a strongly formed view? If so, how did I form this view? What influences may shape my thinking and behavior that I have not considered? Life experiences? Values?
- Are there other people who could help me see this situation differently? What other ways might this problem be re-examined?

At Antioch University Seattle's Center for Creative Change, all students are required to take a sequence of three quarter-long courses on reflective practice and social change. One of the course activities is weekly reflective journaling. To complete this activity, students are asked to respond to a series of questions about a specific event that took place in their lives that week. The questions are intended to build their capacity for discernment:

- Where and when did the event happen? What did I do? What did others do?
- What were my thoughts and feelings at the time of this event?
- Why did I think and feel this way? What were my assumptions, beliefs and expectations during the event? What were my mental models?

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<sup>27</sup> See York-Barr et al.'s *Reflective Practice to Improve Schools: Action Guide for Educators* (2001) and Peavy's *By Life's Grace: Musings on the Essence of Social Change* (2002) for discussion and examples of strategic questioning.

- In your view, what were the assumptions, beliefs and expectations of others during the event? In your view, what were their mental models?
- Can you apply what you are learning in class to this event? What have you learned about this event?
- In a similar situation, do you want to respond the same way or differently?

These questions are designed to deepen students' understanding of themselves and others, especially their previously unexamined assumptions, beliefs and expectations.

Asking students to respond to strategic questions that stimulate deep reflection helps students to understand themselves and the complexity of the world we live in. The deep reflection that is engendered by strategic questions helps students confront how their values and feelings, and those of others, shape the way they approach problems. This discernment encourages them to wrestle with ethical and moral issues and helps them to imagine new ways of being - using the intellect *and* the heart and soul.

Responding to strategic questions *before* moving to judgment or solution-finding also builds an understanding of the complexity and interconnectedness of social systems, as well as a tolerance for ambiguity and the slow pace of change. They are better able to move past the urge to recommend a 'quick fix' to imagine strategic and creative solutions that are commensurate with the scale of the problems we face.

### *Developing the Capacity to Listen to and Engage Multiple Perspectives*

The capacity to listen closely and *openly* to other ideas and perspectives about deeply contested issues, especially when these perspectives are in conflict, is an element of discernment, which is not always developed well. Whatever environmental or societal problem we tackle, ideas for effective remedies vary from individual to individual, and different stakeholders bring their own values and experiences to the table. Effective solutions may be more likely to be found when we examine multiple perspectives and develop shared meanings. Students (and faculty as well) often come to the study of environmental degradation and its social and political roots with strong passions and beliefs about 'right' action. However, many issues cannot be parsed into simple right/wrong or causes/effect dualities. Reflective and contemplative practices help participants engage alternative views openly, beginning the work of understanding the complexities of different perspectives and cumulative aggregate effects.

This kind of reflective practice is courageous, even dangerous, because it requires that we also examine our own perspectives and behaviors closely. Reflective or contemplative work may help us discern the hidden forces at work within ourselves, other persons and institutions which either encourage or inhibit the establishment of the common good, and deeply hearing another's perspective may mean you must be open to changing your own ideas and opinions.

In Marie Eaton's *Food for Thought* class (at Western Washington University's Fairhaven College), students study the 'green revolution' in India and Africa and the impacts on food supply and seed production. These discussions often begin with students venting frustration with the World Bank and USAID policies and practices, typically posed in 'us-them' rhetoric. In order to complicate their understanding of these issues, the class first reads Stephen Carter's chapter on *The Varieties of (Not) Listening* from his book, *Civility*. In this chapter Carter cogently presents the strategies we use in argument to avoid really engaging perspectives that differ from our own.

After discussing Carter's chapter and other background readings on the green revolution, the class visits a local small-scale organic farm. The farmer, Chuck Antholt, is a retired agricultural economist who worked for years in Bangladesh and India on projects for USAID related to increasing the food supply and fostering many aspects of the green revolution. Students are charmed by the farm, and Chuck's generous and open nature, and at the same time are puzzled and baffled by his seeming conflicting stances on organic farming and the green revolution; they find it difficult to put Chuck in the same box as their corporate 'enemies,' Monsanto and the World Bank. After discussions with Chuck, the class engages in reflective writing about the ways his ideas and perspectives complicate their own thinking about food supply problems. The writings focus less on trying to find the 'right' answer to the issues, and more on how the interconnected puzzles of social, political, economic and human issues can be illuminated better if they consider his perspectives alongside those of the others they read.

These reflective exercises encourage a symbiotic relationship between hope and action by creating a dual focus on inquiry and deep listening, reaching inward first to explore our own presuppositions, prejudices and interior landscapes related to the challenge at hand, and then reaching outward to listen receptively in dialogical interaction with those who may disagree. Reflective questioning helps us re-examine our own tightly held views and to develop a more complex understanding of the stories that under-gird each issue in ways that may open new ideas/solutions. Listening deeply to all perspectives is one avenue toward the audacious hope-in-action essential to teaching transformatively (Gennerett and Hicks, 2004)

Sarah Williams at The Evergreen State College has adapted the practice of *Lectio Divina* (literally Divine Word) to develop deep listening skills and the capacity for engaging multiple perspectives. The practice invites a process of dynamic reflection that moves from periods of silent contemplation to reading the assigned seminar text, to listening to the voices of others, to sharing one's sense of the action the text invites.

## An Adaptation of Lectio Divina

Sarah Williams, The Evergreen State College

*Lectio Divina (literally Divine Word) traditionally has four steps: read, meditate, pray and contemplate. A passage of text (or in the original form, scripture) is read; then, its meaning is reflected on, both individually and collectively. This adaptation is used to develop deep listening skill and the capacity for engaging multiple perspectives. Although there are many ways to practice Lectio Divina and a growing literature about it, this adaptation is based on classroom experimentation at The Evergreen State College with Sisters from the Saint Placid Priory (see Sisters Christine Valtner Paintner's and Lucy Wynkoop's 2008 book on Lectio Divina) and the work of Ivan Illich, In the Vineyard of the Text: a Commentary to Hugh's Didascalicon.*

Form a circle. Each participant needs to have a copy of the text assigned for the day. The steps in the following process may begin with any participant, but the speaking order follows clockwise around from the initial speaker. Silence and passing is always an option. A facilitator guides the process and keeps track of time.

### 1) **Selecting the text for deeper consideration.**

After an initial period of two minutes of silence, reflection, contemplation, or prayer, each participant shares a chosen selection from the assigned text. Length should be a minimum of one sentence and a maximum of one paragraph.

Two minutes of silence follow during which participants contemplate the shared selections. After this silence participants are invited to suggest a specific selection for use for deeper contemplation by reading it aloud. Sometimes the choice is obvious to all. Other times several rounds of re-reading selections followed by periods of silence for discernment are necessary. No arguments are made *about* selections; rather advocates of particular selections simply re-read the selection, beginning with page number. Agreement is reached when no alternate selections are read.

### 2) **Being engaged by a word or phrase:** The selected passage is read aloud twice, once each by any two participants.

Two minutes of silence follow during which participants reflect on just one word or phrase that speaks to them from the passage. This one word or phrase is then shared around the circle with no elaboration.

### 3) **Listening for the text to speak:** The passage is read aloud twice, once each by any two participants. Two minutes of silence follow during which participants listen for what the text is saying to them. Participants then are invited to share openly what they have heard. The most effective language to stay grounded in the text, to avoid moving into personal response and to engage heartfelt thinking might be, "The text is telling me...." "No "I" statements.

### 4) **Listening for what action or inaction the text invites:** The passage is read aloud twice, once each by any two participants. Two minutes of silence follow during which participants listen for what the text is inviting them to do. Participants then are invited to share openly what the text has invited them to do. For example, "The text invited me to...." Again, no "I" statements.

During this round participants are encouraged to listen carefully to what the person to their left shares. The lectio ends with two minutes of silence during which each participant "holds" (reflects on, prays for) the words shared by the person to her/his left.

## Making a Creative Response

Those studying the brain and cognitive response understand that pause is essential to the creative, imaginative process. Contemplative and reflective activities help the mind imagine new ways to approach old problems. As we face the overwhelming challenges of the 21<sup>st</sup> century and strive to re-invent or reshape the human systems, we must learn how to transcend our habitual reliance on facile clichés, short-term remedies and technological fixes and reach toward what Thomas Berry called the 'creative' (and perhaps as yet unimagined) response (1988).

A first step in finding the creative response is visioning what might be possible. Since 1997 Gary Bornzin, at Western Washington University's Fairhaven College, has been teaching *Visioning Sustainable Futures*, a quarter-long course which uses a series of focused contemplative and reflective activities to invite students to "...individually and collectively begin to uncover, create, and share compelling stories and visions of a positive future that inspires people to come together to solve the problems of our times." With his students, Gary also asks the question, "Can visioning healthy sustainable futures help replace fear with hope, apathy with vitality, despair with dedication?" As Kenneth Boulding, futurist/economist said:

The image of the future...is the key to all choice-oriented behavior. The general character and quality of the images of the future which prevail in a society is therefore the most important clue to its overall dynamics. The individual's image of the future is likewise the most significant determinant of...personal behavior (1973, v).

So Gary's class engages the issues of our unsustainable practices on both an intellectual and personal level, using both content and pedagogy that helps students move beyond "...the nihilistic images [that] are paralyzing us into an inability to forge more positive and constructive ones" (Polak, 1973, p. 21) to stimulate their imaginations about possible futures and creative responses. He begins with reflective exercises that openly explore despair and draw on Joanna Macy's invitation to 'be with the suffering' before moving to solutions.<sup>28</sup> Students write, reflect and discuss (in community) their fears of the future and the magnitude of the problems, asking T.S. Eliot's challenging question: "Where does one go from a world of insanity? Somewhere on the other side of despair."<sup>29</sup> Together they explore the possibility that hope *is* on the other side of despair, and that we stand a better chance if we approach venturing into the future as a collective process.

Another early exercise in the class is a guided meditation about a *most desired* home. This visioning is an important step in the work of the class, quite different than studying about the *problems*. The exercise, beginning with Susan Griffin's poem "Bending Home" (1998) ["*It is not real, they tell us, this home that we long for, but a dream of a place that never existed. But it is so familiar! And longing in us is ourselves.*"], invites students to walk along a path to this home place and to articulate all the details they notice around them. As the exercise progresses they find themselves pulled and attracted by the clarity of their desired positive future, rather than being pushed by the often familiar and compelling negative aspects of today's world. As students begin the class work required to envision a positive future, they regularly come back to this exercise as they widen their vision beyond their individual home to include the rest of the planet.

To move from vision to action, students focus on particular elements of their vision (food, housing, land use, energy, health care, transportation, education), and using systems

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<sup>28</sup> The work referred to here is Macy and Brown, *Coming Back to Life: Practices to Reconnect Our Lives, Our World* (1998).

<sup>29</sup> *The Family Reunion*, pt. 2, sc. 2.

theory, develop a plan to bridge between the present reality and their idealized future, articulating the possible steps for getting from here to there and the interconnected and complex challenges faced by those seeking possible solutions. They are asked to provide specific examples where allies are already working toward these visions as well as illustrations of how their proposed solutions do not just solve individual problems, but work toward improved interactive systems in the context of a transformative global movement.

Student response to this course is powerful and empowering. As one student said in her self-evaluation:

Global sustainability is increasingly the social and environmental imperative of the 21<sup>st</sup> century...This course provided an intimate atmosphere where future visionaries came together to discuss and analyze aspects of our society that we feel are inefficient and to brainstorm different solutions that we could implement to make a change for the better in our world. When sharing our personal visions of the future I felt more empowered...Being surrounded by peers who share similar visions only strengthened my ambitions to be part of innovations that will simultaneously integrate sustainable economic development, environmental protection and social equity [functioning] as an interconnected dynamic system.

### *Fostering Engagement in Community*

Reflective and contemplative practices enhance sustainability education by fostering social engagement in students. Indeed, faculty and students at institutions participating in the Curriculum for the Bioregion repeatedly say that social engagement and community service learning are important elements of their education. Voicing their desire for more opportunities for significant learning in the public and private sectors, they seek to integrate education with self-growth, employment and public service in the context of sustainability and social justice.

Many colleges and universities already use community-based service learning to link the classroom with the larger world and to foster a sense of social engagement in students. Campus Compact, a national coalition of more than 1,100 college and university presidents representing some six million students, is dedicated to advancing “the public purposes of colleges and universities by deepening their ability to improve community life and to educate students for civic and social responsibility.” But fewer incorporate reflective and contemplative practices into their service learning work.

One example where this is being done is in the Center for Creative Change (C3) at Antioch University Seattle. All students in their second year of graduate studies are required to engage in a nine-month long “change project” with an organization or community of their choice. This approach is based on Donald Schön’s ideas about the reflective practitioner and “knowing-in-action” (Schön, 1983). Not only do students work alongside the people in their organization or community, they are expected to engage in

reflective practice with them, on their own and with their classmates framed by the kinds of reflective journaling questions presented above. Almost 20% of their degree credits are allocated to this work, indicating the importance that C3 faculty attach to fostering social engagement through reflective practice.

### *Sustaining Ourselves for the Long-Term*

A world on a more sustainable trajectory is not likely to be accomplished in the near future, so, for both ourselves and for our students, we need to develop a long-term capacity and resilience for community or civic engagement, which means considering personal sustainability in our teaching and in our personal lives. It also requires that we help students realize that cycles of stress and sacrifice come with engaging in any social change endeavor.

Sadly, too many people engaged in social change often live unsustainable lives. Making time for reflection and contemplation goes against the grain of our “no time to think” culture (Levy, 2007). Both faculty and students are inundated with information, which is increasingly difficult to process and understand. As writer Maggie Jackson (2009) points out in her book, *Distracted*, our capacity to make meaning and reach deep insight is increasingly challenged as the amount and complexity of information mounts.

Many, too many, public servants and activists get tired and frustrated. Some burn out or become seriously ill. This is unhealthy for the individuals concerned and bad for collective efforts to advance sustainability. As faculty we need to look after ourselves. And, we need to teach our students how they can look after themselves for long-term community engagement. How can we live our lives in a way that sustains and nourishes us? Are we so busy at working to save the world that we are slowly destroying our health in the name of doing good? Are we feeding ourselves to the system we seek to change? These are important questions to ask.

In their book on how leaders can sustain themselves, Boyatzis and McKee argue that today’s leaders face unprecedented challenges that result in a vicious cycle of stress and sacrifice, with little or no recovery time built in; therefore, “...leaders must consciously (step) out of destructive patterns and (renew) themselves physically, mentally, and emotionally” (2005, front flap). One initiative that facilitates such conscious stepping away is Courage and Renewal. Founded by Parker Palmer in 1997, this national organization facilitates retreats throughout the United States where teachers, medical professionals, clergy, and others in helping professions can reflect on their life and work and renew their commitment to their profession. As Parker Palmer (2007) has pointed out:

Self care is never a selfish act - it is simply good stewardship of the only gift I have, the gift I was put on earth to offer others. Anytime we can listen to true self, and give it the care it requires, we do so not only for ourselves, but for the many others whose lives we touch. (pp. 30-31)

Reflective and contemplative practices can be – and need to be – an antidote to the unsustainable pace of contemporary society and its workplaces. Our experience with these pedagogies convinces us that we need to develop capacities for reflection in students as they prepare for participation in the world. The ability to pause and step above the fray, and the ability to reflect on experience can help students think systemically and develop creative strategies commensurate with the scale of the problems we face. At their best, these practices help us to move from burn-out to balance, from isolation to connection, and from despair to creative possibility. In doing so, we can engage from a place of authentic and compassionate wisdom.

## **Conclusion: Ongoing Issues and Tensions**

This essay makes a case for including pedagogies of reflection and contemplation in sustainability education. But this work is not without issues and tensions that defy easy answers. Our faculty learning community has identified many such challenges and is continuing to explore them collaboratively. Among them, several stand out for us.

In particular, we have wrestled with the curricular and pedagogical challenges of introducing reflective and contemplative practices into our classrooms, and especially their challenge to traditional approaches to teaching and learning. Not only do these practices shift our roles from being a “sage on the stage” to being more of a “guide on the side,” they also require us to make changes in curriculum design, course delivery, and student assessment protocols.

These practices also ask students to participate in their learning in new ways: reflection and contemplative practices emphasize the need for students to take a more proactive role in their own learning, including developing their capacity for moral reasoning. Many students may not be comfortable with pedagogies of reflection and contemplation because of their cultural origins, individual beliefs, religious practices, lifestyles, and ages. Especially when students are encountering these pedagogies for the first time, as their teachers we will need to provide sufficient rationale and scaffolding for these activities so that students feel safe and supported in participating in them.

A second issue we continue to discuss is how to cultivate acceptance for these practices within the student body, within our institutions, and within the larger academy. We are all too aware that the national education system has become increasingly focused on content-and-skill development for ready employment and on realizing greater efficiencies and achieving production-targets. Given that contemplative practices have had a complicated relationship with the academy, as noted earlier in this essay, and that reflective practices are not widely embraced as classroom strategies, how can we create and nurture support for them, particularly in the sciences, where personal reflection can be misunderstood as undermining academic rigor or confusing the scientific method? Two recently formed organizations, the Association for Contemplative Mind in Higher Education and the Mind and Life Institute offer important venues for college and university faculty to join with scholars of reflective and contemplative practice to share emerging theory and

practices. As the communities of practice interested in these pedagogies continue to expand, and as literature on reflective and contemplative practices develops further, we believe that these practices will become more widely accepted and supported.

A third tension is the “no time to think” phenomenon characterized by the overload of information-technology, which robs us of the time and capacity to think deeply (and, frankly, to *care*). Compounding this is the growing popularity of online teaching and learning. Yet at the same time, these same technologies hold such promise for communication, organizing, and connection. We must embrace this paradox and continue to talk with each other and our students about the role of technology with respect to sustainability education.

While we acknowledge these issues and tensions, we are moving forwards to incorporate reflective and contemplative practices in our own teaching. Based on our experiences, we believe that these practices can help prepare students to live more sustainably, morally, and compassionately in a world of increasing complexity and uncertainty. At the same time as interest in sustainability education continues to grow, we hope that conversations about promising and diverse pedagogies will grow as well. Ultimately, we hope that both the content and the teaching strategies that animate sustainability education will stimulate a much larger reexamination of the mission and purposes of the higher education.

### **Returning to Where We Began...**

As noted at the beginning of this essay, “*just showing up for class*” feels overwhelming to students already overwhelmed by their awareness of globalized suffering and the fear of extinction. For Alice Walker (2010) and other members of Code Pink who bore witness to atrocities in Rwanda, Eastern Congo and the Gaza Strip, dance was a creative response for overcoming speechlessness in the face of suffering and death. In her poetry and prose, Walker has described being pulled to her feet to dance by the very persons whose traumatic experiences rendered Walker speechless. Dancing was a way of being with difficult, overwhelming emotions, of being in rhythm with others, of embodying and thus re-integrating, or, in the language of neuroplasticity, of re-wiring experiences that disconnected emotions, thought and bodily sensation. While there is no measuring stick for comparing individual experiences of trauma or its impact, the current global suffering in relation to environmental degradation, warfare, totalitarian capitalism and social injustice does manifest itself in the college classroom.

Students in year-long Dance of Consciousness program at The Evergreen State College program danced each week, specifically to inquire into the relationship between dance and consciousness. Neo-Classical Odissi dance as taught by Ratna Roy allowed our learning community to compare the cosmology of the Shaivist and Bhakti traditions of pre-Aryan contact with the cosmology of quantum physics, whose view of reality as the metaphoric dance of probabilities was popularized in the 1970s with Gary Zukav’s *The*

*Dancing Wu Li Masters*.<sup>30</sup> The program was designed to introduce students to the emerging interdisciplinary field of consciousness studies using a range of traditional, alternative, and, in particular, contemplative pedagogies. Together we explored how to keep dancing as we face our mortality and the urgent daunting issues that have conditioned us to speechlessness.

Contemplative practices in addition to dance were facilitated by faculty members Don Middendorf and Sarah Williams including: centering, yoga nidra, hatha yoga, dream journaling, mandala creation, and a meditation retreat with Rinpoche Anam Thubten. In addition to dance, students' final projects included Jungian-like Red Books, ethnographies of their brains on text that documented the practice of reading as a meaning-making process, individual research, and community-based projects. Regarding the latter, several students chose gardening, nature-oriented and eco-design projects that were field-based. One student carried a copy of Dolores LaChapelle's *Sacred Land, Sacred Sex: Rapture of the Deep* in her backpack to read during breaks from pulling invasive plants. In her words,

My work was in the Gifford Pinchot National Forest where I studied the consciousness of the forest as I surveyed, inventoried, monitored and managed invasive species populations for Lewis County's Noxious Weed Program. Through this work I became acutely aware of why nature, and particularly mountains and forests, have always meant so much to me. They are a source of pure, unadulterated, whole consciousness. The forest is meditative, gentle, beautiful, accepting, powerful and wise...The earth's wisdom is the Rosetta Stone of logos. [Student, The Evergreen State College]

Without exception students in this program chose a performance project, community-based learning project, or research topic that incorporated first-person with third-person approaches to topics of interest within the field of consciousness studies. Most students' self interests were motivated by a curiosity about the non-conceptual background out of which their sense of self arose. Thus this interest in the self, like the famous zen koan about the finger pointing at the moon, guides the mind to an awareness of interconnectivity, which is characteristic of the contemplative mind. One student found that the daily practice of putting her hands in the soil while working at a local non-profit organic farm was like cradling her own soul. Her project became an exploration of the relationship between soil sustainability and mental well-being. We as an intentional learning community clearly became a living experiment in contemplative education.<sup>31</sup>

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<sup>30</sup> Program texts that supported students exploration of the severed histories whereby goddesses, reverence for the earth, and a sacred worldview disappeared included David Loy's *Money, Sex, War and Karma: Notes for a Buddhist Revolution* (2008); Linda Johnsen's *Lost Masters: Sages of Ancient Greece* (2006); Wendy Doniger's *Other Peoples' Myths: The Cave of Echoes* (2006), Ivan van Sertima's *Black Women in Antiquity* (1984), Ken Wilber's (ed.) *Quantum Questions: Mystical Writings of the World's Great Physicists* (1985), and Amitava Kumar's *Bombay, London, New York* (2002).

<sup>31</sup> Reading Rinpoche Anam Thubten and Sharon Roe's book *No Self, No Problem* (2009) as well as neuroscientists Antonio Damasio's *Self Comes to Mind* (2010) and Stanislas Dehaene's *Reading in the Brain* (2009) became short-hand for articulating this "self" interest, that like the finger pointing at a moon, was, in fact, the contemplation of awareness itself.

As David Orr has been saying for over twenty-five years, on this planet all education is environmental education (1994). However, this realization depends on the cultivation of the awareness characteristic of the contemplative mind, which is why sustainability education requires reflective and contemplative pedagogies. As we nurture students' capacity for contemplation and reflection and the dialogues that will result, we are striving for learning in the moment, but we are also planting the seeds of yet unimagined possibilities, leading to actions that challenge the status quo and to the imagination of bold agendas for reform grounded in a shared vision of a just, sustainable and peaceful world.

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### **Other members of the "Sustainability and Contemplative Practice" Faculty Learning Community who contributed their thinking to this essay:**

Susanne Fest, Antioch University-Midwest; Karen Gaul and Cynthia Kennedy, The Evergreen State College; Mike Gillespie, Professor *Emeritus*, University of Nebraska Omaha and Senior Lecturer (retired) University of Washington Bothell.; Karen Harding, *faculty emerita*, Pierce College; Kurt Hoelting, Inside Passage; Holly Hughes and Peter Martin, Edmonds Community College; Tim Jones and Star Rush, Bellevue College; Gray Kochhar-Lindgren and Kanta Kochhar-Lindgren, University of Washington Bothell; Patricia Killen, Gonzaga University; David Levy and Karen Litfin, University of Washington Seattle, Madeline Lovell, Cynthia Moe-Lobeda, Elizabeth Sikes, and Trileigh Tucker, Seattle University, Kevin O'Brien, Pacific Lutheran University; and Rosalie Romano, Western Washington University. Special thanks also to Sharon Daloz Parks of the Whidbey Institute, whose thinking has played a significant role in shaping this project.

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