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After all, anybody is as their land and air is. Anybody is as the sky is low, the air heavy or clear and anybody is as there is wind or no wind there. It is that which makes them and the arts they make and the work they do and the way they eat and the way they drink. And the way they learn and everything. (Gertrude Stein, 1970, p. 62)

Below the surface of all we do today there is a thrumming. In its palpability the thrum speaks to the felt sense that we must change course so this world continues to be habitable for our grandchildren. For the most part, children and young people are keenly sensitive to the challenges we face. Yet, there are powerful gravitational forces counteracting measures that substantively address the impending crisis we face (Ng-a-Fook, 2010; Manteaw, 2008). The ecosystems that sustain us are sending warning signals we ignore at our peril. A culture, wholly dependent on a finite planet, predicated on infinite consumption is not sustainable. All indicators tell us that how we live in our respective places must change radically, and change soon. Education will be at the center of this shift. Such learning will occur not only in schools, colleges, and universities, but also in communities and workplaces. There have been some valiant efforts to reorient education for the values, behaviours, knowledge and skills that will lead to a different relationship with the places in which we dwell. Yet, our classrooms, communities, and workplaces are firmly affixed in the tractor beam of "business as usual" (Sumner, 2008).

For the better part of a decade now I have been thinking about how literacy learning and literature in relation to the language arts can contribute to the transformative shift required to imagine our way out of what, in all likelihood, will be the dire consequences of our intractability. Literature and the language arts focus on human "meaning- making" including the spoken and written word, as well as representation. This focus contributes vitally to how individuals may understand, maintain, and transform their worldview. Therefore, the language arts classroom potentially becomes a powerful site for reorienting and challenging taken-for-granted cultural assumptions. It offers us the potential to get some purchase in the pull of dominant cultural discourses antithetical to living sustainably and living well.

The impetus for this line of inquiry was my experience teaching children on the coast of Newfoundland during the momentous culmination of decades of blatant disregard for the marine ecosystem. The ensuing social upheaval underscored the connection, the deep interrelatedness of the human cultural world and the biotic realm, the larger living landscape that is the reality of human existence. The shameful ways we have compromised the marine ecosystem and the reductionistic commodification leading to the extirpation of the myriad living beings of the sea had a profound systemic effect on children, families and communities. What happened, and continues to happen, echo Gertrude Stein's words in the epigraph of this essay, "After all,

anybody is as their land and air is... It is that which makes them and the arts they make and the work they do..." The events of the 1990s still being felt today make real Thomas Berry's observation,

We cannot live simply with ourselves. Our inner world is a response to the outer world. Without the wonder and majesty and beauty of the outer world we have no developed inner world. As all those living beings around us perish, then we perish within. In a sense we lose our souls. We lose our imagination, our emotional range; we even lose our intellectual development. We cannot survive in our human order without the entire range of natural phenomena that surround us. (in O'Sullivan, 1999, p. i)

Daily we are made aware, no matter where we live, that our Earth is sending us distress signals. A recent report by a panel of top scientists reveals that a mix of interacting factors including pollution, overfishing and other man made problems is resulting in a mass extinction in the world's oceans – or ocean – since there is really only one (Borenstein, 2011).

The destruction of the Earth and the tearing of the very fabric of life in the name of hyperconsumption (Borgmann, 1997) and the global market economy (McMurtry, 2002) is not susceptible to easy fixes and solutions. Consumerism fueled by pervasive and sophisticated media manipulation pressures parents to work more, longer and farther afield. This is depriving children of a stable home and relegating them to the care of strangers in often crowded day care. There is a marked rise in eating disorders and obesity as children spend hours inside in the company of screens (Norberg-Hodge, 2003). In turn, this lack of connection to people, community and place is having a profound effect on children. Recent research has drawn a link between children diagnosed with ADHD and the lack of opportunities for these children to actively engage in "outdoor activities in more natural settings" and "green landscapes." (Louv, 2005, p. 70) In the United States, "an estimated five million young people regularly take at least one psychiatric drug" (Norberg-Hodge, 2003, p. 11). This cultural preoccupation with materialism and consumption has led to a crisis of meaning (Fisher, 2002) in our society and a "felt sense of homelessness" (O'Sullivan, 1999, p. 235) that must become "the central concern of education in the future" (Berry, 1999, p. xii). We require an educational vision that honours our need for connection to people and place.

Yet, what constitutes such *connections*? In what ways can curriculum theorizing move us toward a vision of education that provides a safe place for synthesis and intuition? How might it provide for the mutual sharing of subjectivities and the emergence of a relational consciousness that radically deepens our sense of interconnectedness? In Atlantic Canada recently developed curriculum documents introduce environmental science as a course of study in high school. Throughout all grades environmental education emphasizes technology, trade and resources. Most often, the documents reflect a biological approach with a strong focus on efficient use and wise management of those resources. The underlying belief of curriculum developers is that, by understanding our reliance on the natural environment, researching endangered species, calculating ecological footprints and memorizing the "Rs" in the recycling process, our children in turn will become ecologically literate and sensitive citizens. The firm curricular hope is that this approach will inculcate a knowledge that results in a sensitive, respectful, and restrained use of nature.

Without a doubt, science has its place in environmental education. There have been scientific practices that seek to challenge the objectifying atomism of modern scientific inquiry by emphasizing the experience of the first hand encounter between the individual and the thing being studied (Seamon and Zajonc 1998; Bortoft, 1996). However, these practices are marginal in comparison to the dominant methodologies for

scientific inquiry. Such inquiry is predominately based on a culture of objectivism and the impersonal. And yet, the abstraction, the impersonal, the objectifying stance of science can help us know some *things* with a degree of certainty. Science has produced an invaluable body of knowledge about intricate ecological systems, the value of species and the complexity of species diversity. Scientific study provides information on which we base decisions that will directly affect the health and well being of this planet and in turn each of its inhabitants. However, the knowledge gained solely through scientific study begs the questions, "In what way do our children *know* the living Earth and what value do they give it?" Wendell Berry (2000) says, "We know enough of our history by now to be aware that people *exploit* what they have merely concluded to be of value, but they *defend* what they love" (p. 39). Does the technical, resourcist bias of the sciences, with its dispassionate, objectifying language, make it incapable of bearing the burden that we place upon it?

David Abrams (2010) reminds us that abstractions inevitably lead to a retreat from directly experienced reality. The "truth", as understood by science, cannot be accessed by our senses; the real truth lay hidden behind, beyond or underneath in a world of electrons, nuclei and neurons. Abram reflects on his science education as a premed student as having the effect of distancing him from the immediate world of direct experience and its mystery and wonder;

The world accessible to the senses, the visible world of hillsides and rain and flocking birds, came to be seen as a secondary dimension, a largely illusory field of appearances waiting to be penetrated... the animate nature that our senses revealed was no longer fundamental, hence few people seemed very upset about the rapid destruction of forests or wetlands or the accelerating destruction of diverse creatures. (p. 68) Things cannot survive as abstractions, but only as unique, individual creatures, entities living in place. This "life" is a particularity, a relationality of embeddedness in place that is unavailable to empiricism and objectivism. This life is a sentience that engenders care and affection. It calls for a kind of sensitivity, the pathic, the felt - a "living way of knowing", that is perhaps not a "knowing" at all (Jardine, 1998, p.95). At least not in the sense of knowing as we usually consider it.

These concerns motivated Marilyn Doerr (2004) to adapt William's Pinar's *currere* for implementation in a high school science based Ecology course. Currere encourages autobiographical self-reflection on experiences that shape our understandings and assumptions that are taken for granted. Doerr developed a practice she called Environmental Autobiography to counterbalance the mechanistic, objectification of the scientific approach as a means to let students begin to emotionally connect with the environment. Doerr explains what happened in her Ecology class.

During the times we were exploring the basic scientific principles of ecology, we were also exploring the interior lives of people interested in ecology – themselves...I needed to find something that would move my students from "I know" to "I care." (2004, pp. 30, 31).

Science speaks the language of abstraction and abstract categories: "resources", "ecosystem", "species", "management" and "endangered." It is not the place to explore the personal and the passionate. Wendell Berry (2000) would say of this language if carried too far becomes a language of "false specification and pretentious exactitude, never escaping the cold-heartedness of abstraction" (p. 45).

I want to be perfectly clear that this is in no way to denigrate or devalue the scientific enterprise. Science has provided and continues to provide, through the same abstract and reductionistic methodology, the conveniences of technology and the advances in medicine that are to be

celebrated as great human achievements adding immeasurably to our quality of life. Science allows us to understand conceptually the diversity of life and the importance and complexity of life systems. However, my concern is for children who learn about the more-thanhuman world almost exclusively through the sciences. Science is powerful; the culture and profession has legitimacy and the confidence of society. There is an undeniable *faith* in science – one that precludes, for many teachers and curriculum developers, criticism or critical thought. This faith is evident in our schools where the esteem in which we hold the sciences is reflected in the resources allocated in budgets and time allocated in the student course schedules. We believe in science. Science/technology, with its dispassionate, impersonal, "objective" language can help us know many things, but can it engender a knowledge from which will emerge the affection, caring, and concern needed to value, love, and protect? Can it deepen the students' sense of an ethical relationship with the "other than humans" with whom they share their places? Can science allow students to address inner connectivities of body, mind and emotion to awaken and develop a deeper connection with the living landscapes in which they dwell? Seeking answers to these questions takes on an urgency as the ocean ecosystems fail and the once vast populations of northern cod disappear taking with them the Atlantic coastal communities that depend on them for survival.

I look to the language arts as a way of knowing our place. What is its potential to foster a literacy of the living, more-than-human landscape that comes out of a vital and particularizing language – a language unavailable to objectivism? It is my desire to inquire as to the nature of this knowing (Howard, 2006; Howard, 2007). How we can define our human abilities, language and imagination, as products of nature, and see them as mediums by which we may grow in our relationships with the living places we inhabit? How can we as "textual animals" connect

to our places through the role of mind and emotion and the agency of language?

Textuality as embodied integration

Twentieth century philosophy has made language its central, guiding concern. Unfortunately, this has done little to allay our separateness and alienation from the world; rather, the argument has been made that philosophy's preoccupation with language has exacerbated the rein of dualism. Now it is language that is severed from the rest of the world (Smith, 1999; Peterson, 2001; Kidner, 2000). The reification of language is captured by philosopher M.C. Dillon. He refers to the creation of a "semiological reductionism" best characterized by Derridean deconstruction

...in which all sense–making is believed to be trapped and endlessly refracted within the play between linguistic signs, such that no reference is even possible to a reality outside of or transcendent to human language" (in Fisher, 2002, p. 127).

Ecology and phenomenology have much to offer a way of thinking about language and experiencing language that situates it "*within* this world, as an expression *of* it" (Fisher, 2002, p. 127). As with Erazim Kohak's (1984) notion of the word as a "gift," it is only to language that we can turn to better comprehend the relationship between language and the living Earth. This is a fascinating study that others have pursued (Abrams, 1996, 2010; Abrams & Jardine, 2000; Jardine, 1998, 2000; Gendlin; 1992a, 1992b). Language is understood more often in generative terms as a "natural reservoir of variation, a sea of possibilities. As such, language is not just a way to express intelligence but a principle source" (Davis, et. al, 2000, p.127). Humberto Maturana emphasizes that the phenomenon of language does not occur in the brain, but in "a continual flow of

coordinations of coordinations of behaviour... in the flow of interactions and relations of living together" (in Capra, 2002, p. 54). Pointing to our inherency in language as a pathic, fully embodied experience Merleau-Ponty believed that languages are different "ways for the human body to sing the world's praises" (2002a, p. 187). Speech and thought are, according to Merleau-Ponty "the perceptible world's explosion within us" (2002a, p. 187) He calls language "a bubbling up at the bottom of ... mute experience," and "the very voice of the trees, the waves and the forest" (2002b, p. 155). Understanding language in this manner allows for a deeper sense of how young people may make the world intelligible, but also how they may reflect the world in a particular way.

Gendlin (1992a) also uses the metaphor of feelings "arising" or coming "up" in us as we experience the world. His work in particular captures the interrelatedness of our biology and our defining human capacity of language. Gendlin's work helps us understand ourselves as textual animals. He writes that feelings are a "lifting out" and this lifting out leads to articulation, where "the feeling knows how to speak and demands just the right words. The feeling, more exactly, is sufficient to bring the words to the person's speech" (Gendlin, 1992a, p. 52). Putting it this way Gendlin ties the body to language in an important way. However, this is not to put forward that language arises from some untainted "natural conduit," however it is to say that language arises from "the perceptual interplay between the body and the world" (Abrams, 1996, p. 273). Through language children may come to know the world, and realize the world speaks back. In this view Fisher (2002) says that language originates as a kind of gesture that draws its meaning from our contact with the world, but our perception of this world is itself structured by language already sedimented into it.

That is to say, our linguistic symbols not only make the world intelligible but in doing so also *change* the world, bringing it forth in a way that favours a particular view or interpretation... language on the one hand, and the phenomenal world, on the other, form two open systems which mirror and feed one another; that the world knows itself as it is reflected in language, and language knows itself as it is reflected in the actual world. (p. 128)

This vision of language as a symbolic system is inextricably webbed with and emerging out of the world we experience. The vision offers a relational, deeply interconnected sense of language and humans as textual animals able to know the world, speak to it and have it speak back. It opens up a sense that reading, writing and response, the space of transaction between reader and writer draws a particular power from an inherently organic, sensorial matrix – an interconnected reality. This curricular vision stands in stark contrast to a closed system of language that floats above the world, disconnected from experience, signs endlessly referring to other signs in a perpetual deferral of meaning.

Current curriculum documents tend to reflect a technical rationality when describing our relationship to language. For example, in outlining the "principles underlying" the English language arts (Alberta Learning, 2000) the documents indicate a strong constructivist stance. Language is described as "a powerful tool," a "primary instrument" (Alberta Learning, 2000) from which "meaning is constructed" (Government of Newfoundland, 2000). It is a view that understands students' experience with language to be primarily concerned with "strategies and processes," of "solving information problems" (Government of Newfoundland, p. 3). Therefore, how might our view of language, reading, writing, representation and response change if approached as integral to an inclusive community of interrelated presences? Borgmann (1992) hints at this emerging relationship when he tells us,

> The only reality author and reader can be sure of are traces of ink on a page. These marks, no matter how real, would forever be silent were they not embedded in a

communal context wherein they invite and instruct the reader to recall and call for a certain reality. A text by itself is helpless; to require help is its virtue. The requirements for its vitality are the existence of a literate community and the presence of an eloquent reality. These certainly should be the conditions of life. (p. 117)

The interrelatedness and interdependencies inherent in reading, the "eloquent reality" as Borgmann refers to it, make reading an ecological endeavor. Martha Nussbaum (1990) writes, "A community is formed by author and readers" (p. 48). This community is enriched if it is inclusive and makes room for other voices, other presences, if it is expanded to include *all* life. Nussbaum writes, "In this community separateness and qualitative difference are not neglected... But at the same time it is stressed that *living together* is the object of our ethical interest" (1990, p. 48). Reading and the teaching of reading informed by this view of textuality leads us from the page and into the living landscape that encompasses us.

Textuality is at the heart of experience directing our attention to the unique, to the world of particulars, to emotion and insight. Gary Snyder (1990) moves textuality out into the physical world.

The stratigraphy of rocks, layers of pollen in a swamp, the outward expanding circles in the trunk of a tree, can be seen as texts. The calligraphy of rivers winding back and forth over the land leaving layer upon layer of traces of previous riverbeds is text. The layers of history in language become a text of language itself. (p. 66)

In *The Crafty Reader* Robert Scholes (2001) also alludes to the inherency of language, of text in an embodied integration in who we are as human beings living in the world.

Textuality runs deep, since all human beings can be seen as textual animals in more than one sense. First of all, like every living thing we replicate ourselves through the transmission of genetic information coded in nucleonic acids, DNA and RNA. We are biologically, the result of a textual process. We have been scripted. Beyond that, of course, human beings are born into linguistic and cultural heritages that are themselves powerful texts, shaping our possibilities and impossibilities, and we function amid webs of information carried by various audible, visual, and verbal media that shape the ways we live and die. We never escape textuality and if we live after death, it will be textually, in signs, memories, photographs, words, pixels, or on a page or cut into stone. (p. 78)

What is being described is a dynamic, vital space in which life seeks expression; it is a space of disclosure, of new meanings, of new forms and it is embodied, and interacting in the life process.

Creating a space for connection

To test some of these ideas and seek the full potential of our defining human abilities – language and imagination – to foster a deeper sense of interconnectedness, I undertook a project in a grade nine classroom in rural Newfoundland and Labrador. I had taught middle and high school on the North West coast of the island during the 1990s and observed firsthand the environmental, social and personal devastation that resulted from the collapse of the ocean ecosystem. I was returning to inquire into the pedagogical possibilities to use language arts to inquire more deeply into the ecological relationships that are our collective reality.

The school year began, as school years usually do, in the brilliant sunshine and soft offshore breezes of September. In the early weeks of the new year I got to know the Grade 9 Language Arts students. I

explained carefully the project that I was undertaking and I asked for their cooperation. I told them that over the next several weeks, we would be exploring, through reading, writing and responding, the literature of their bioregion. We discussed the concept of the bioregion, the relational structure of living in place and looked for examples around us to demonstrate how so much of who we are – our culture, heritage, and way of life – is directly tied to the places in which we live and the rhythms of time, tide and season. We talked about how language reflects, and may influence their relationship and understanding of, the larger life processes in which they are embedded.

These were not difficult discussions. The students seemed keenly aware of the many connections and the quality of interdependency that marked their lives. They understood that almost all aspects of their lives are influenced by the larger living landscape. During the first few weeks of that September I took the time to learn about each of the students' lives and how they understood conceptually the ecological principles at work in their lives. A key component of this initial introduction was the writing notebooks that we set up in our first week together. These were simply project covers, or Duotangs[®], with detachable three holed loose leaf that were portable, inexpensive and would serve as a repository for their thoughts and responses for the twelve weeks of the project. The writer's notebooks were meant to be spaces in which students could imagine and record the connections, the observations, the descriptions and evidence of the ecological relationships that emerged out of their daily living. The notebooks would allow the students to address questions that would increase awareness of how they live within their places. This aspect of the project, as indicated earlier, is similar in approach to the *currere* that Marilyn Doerr (2004) employed in teaching high school ecology, a self-hermeneutical and phenomenological method (Pinar, 1975, p. 403) that allowed students to address questions "that increase awareness of how they live within their worlds" outside the oppressive habits of compliance that schools produce (Doerr, 2004, p. 9).

In introducing the concept of the writing notebook to the students it was important for them to see the books as intimate spaces to explore freely outside the rigidity of many classroom practices. I wanted the books to be a place in keeping with Maxine Greene's assertion that

(w)e need spaces... for expressions, for freedom... where living person's can come together. It must be a space of dialogue, a space where a web of relationships can be woven, and where a common world can be brought into being and continually renewed. (Greene, 1988, p. 296)

I gradually introduced the notebooks as a space for transformative practice (O'Sullivan, 1999; O'Sullivan and Taylor, 2004). The notebooks would become important tools for the students' tentative inquiries into their tacit assumptions, perceptions, expectations and actions. My hope was that the notebooks would become a fertile medium out of which fragile, yet tenacious roots of ecological sensibility may unfold. The notebooks would allow students pedagogical opportunities to go in and explore what Gendlin (1981) refers to as felt-sense , to attend to the body, to the pre-verbal that comes before the cultural patterns, assumptions, rules and values that we, as members of this culture, share as "reality". The focus of the writing notebooks would be the "ecological self" the co-constituted relationships, and modes of reciprocity and the lived experience of these ways of being (O'Sullivan and Taylor, 2004. p. 13).

In creating a protected space for writing and thinking, I drew heavily on the work of phenomenologist and philosopher Eugene Gendlin (1981) whose ideas about felt sense as a "a body-sense of meaning" exemplifies the ecological, physical and linguistic coupling of our biology and our thoughts, imagination, emotion and expression (p. 10). Sondra Perl (2004), whose work brings Gendlin's thinking to the creative act of

writing and to the teaching of writing, also informed my thinking and practice when introducing the writing notebooks to the students. I adapted Perl's (2004) "Guidelines for Composing", an exploratory writing technique designed to:

give as an experiential base from which to examine how our bodies and minds are connected, how meaning emerges not only from cognition, but from intuition, and how the body itself is implicated in knowing and in the construction of knowledge" (p. xvi).

Writing with felt sense

Guided by the work of Gendlin and Perl I wanted the notebooks to become spaces in which the tension between stability and change might serve as a means to nurture the ecological self. I envisioned the notebooks as spaces that would allow for the emergence of a sensibility for our interconnection and interdependence with a larger living field; I saw them as creative clearings that make present and visible to us things that we would not otherwise perceive. My hope was that the students might access something new, by coming to understand that language and meaning are connected to inchoate, bodily senses that can, with guidance and practice, be accessed.

In the first two classes I devoted time to discussing listening to the body and drawing upon felt sense for inspiration and as a source of creative renewal. I began simply by asking them about the mind-body connection. It didn't take long before "butterflies" in the stomach came up along with other readily identifiable physiological manifestations of fear, surprise and joy. Nonetheless, it was a start; I wanted them to distinguish between feelings and felt sense. Feelings are easily identified, but felt sense not readily so. I thought the subtleties might be lost on them as some students persisted with sensational stories of mind over matter, incidents having to do with telepathy, bare feet, hot coals, and beds of nails being the most popular.

They needed to understand that felt sense was more vague, murky, puzzling and unsettling. Gradually, they came to understand felt sense more as the niggling sense that will not go away until we respond to it somehow. The students provided examples of forgotten names or titles of movies that "bothered" them for hours until they could be retrieved in a flood of released tension. They came to understand that the sense communicates something that is prior to words or thoughts. I used the terms *embodied, felt sense, body intelligence and body knowledge*. It was important they understand the practice of attending to felt sense to develop bodily intelligence. Together we would experience the process that allowed felt sense to form; learn to listen to what felt sense is saying; and call upon it when we were writing.

Through the generative power of linguistic and physical couplings and recombinations, narrative and poetry produces and reproduces possible realities, what Martha Nussbaum calls "non-existent possibilities". The notebooks were a repository of thoughts, connections, memories, stories, poems, insights and imaginings that would take students beyond the actual to realize alternatives, and possible perspectives. The notebooks were designed to help students to radically rethink their place in the larger living world; to be sensible to the life force to which they belong; and to express this belonging as clearly and precisely as possible by connecting their lives to the more than human community of life.

Another task was to help my students understand the space represented in the notebooks. In the first days we talked about the notebooks as a repository for collecting things. This was an idea quite familiar to middle school students. We brainstormed ideas about what may go into the notebooks; they came to understand they could describe

what they see, what they hear and what thoughts they may have, as well as their responses to sights, sound, feelings, memories.

We moved into a discussion about the notebook as a place for thinking and reflecting. I shared with them writing about the art of journaling from Clare Walker Leslie and Charles Roth's (2000) *Keeping a Nature Journal*, Randy Bomer's (1997) *Time for Meaning: Crafting Literate Lives in Middle and High School*, Donald Murray's *Write to Learn* (1990) and Georgia Heard's (2001) *Writing from Home*. I wanted students to grasp the purpose of the notebooks. While diary writing and day journals were commonplace for them, the writing notebook was to be a repository of insights, observations and feelings that implied further writing. This distinction was subtle yet important. The notebooks spoke to, prepared the ground for, and launched future pieces of writing; they served as a space of collection toward further writing. This distinction would take a few weeks for students to grasp.

Close observation and the primacy of the whole

Allowing the writer's notebooks to be a rich site to explore their connected existence, the "ecological self", meant ensuring the students' first entries were rewarding and fun. I began from the premise that we generate knowledge from the practice of living. Knowledge is not individually derived and held, but rather generated within our relationships with others and the world around us. We would begin in the classroom and eventually the children would move outside to engage with the living spaces in their lives. To help me think about the practice of close observation and attention to detail that was outside the objectifying stance of a typical science field trip, and, at the same time, to interrupt the deep rooted tendency to break down and quantify, I drew inspiration from the approach to scientific inquiry developed by Goethe (Seamon and Zajonc, 1998; Bortoft, 1996). Goethe challenges the

atomism of modern science with a method or a "way of science" that emphasizes, instead, "an intimate first-hand encounter between student and thing studied." (Seamon, 1998, p. 1) Goethe's science is predicated on the "primacy of the whole" (Bortoft, 1996, p. 6). Many of the writing prompts and practices I developed involved close observation and participatory engagement. I wanted the children to develop their perceptual abilities through guided practice and to record and respond with patience to their experience. It was through this embodied encounter with what is often closest and unnoticed that detail, pattern, diversity, and interdependence might emerge and reveal themselves. Clearly, my intention was not to expect from the students the rigorous and exacting quality of observation and interpretation demanded by Goethe's method. However, by coming to see more intimately, in the spirit of Goethe, children may be nurtured in developing a deeper sensibility for the existence of their ecological selves.

David Seamon (1998) writes that Goethe believed that it was not adequate to simply develop keen powers of observation. Indeed, Goethe argued it was through heightened abilities to observe the living earth that we deepened our inner sense of connectedness and relationality with a larger living world. Quoting Goethe, Seamon writes;

Each phenomenon in nature, rightly observed, wakens in us a new organ of inner understanding. As one learns to see more clearly, he or she also learns to see more *deeply*. One becomes more "at home" with the phenomenon, understanding it with greater empathy, concern, and respect. (1998, p. 3)

So, it is to the "spirit of Goethe's way of science" that I turn to find a language that allows for a better articulation of what it means to look closely, to observe and to record. Goethe's way opens up a language of nature, of pattern, of wholeness, of networks, of detail, diversity and connection.

And so it was that, with twenty-six new brilliantly multi-coloured notebooks in front of them, I sensed the students' hesitancy as they leafed through the empty pages of white lined paper. They needed to begin in a way that was interesting and non-threatening. I began in a way that I usually do when trying to "win over" a reticent, doubtful group; I decided to begin with a story of my own. I told the students about an experience I had a few years ago that helped me realize more deeply a sense of interconnectedness and relational awareness. My friend and I planned to take our children for a day trip to Gros Morne National Park in western Newfoundland. My friend's son, who was seven years old at the time, is autistic and rarely uses the spoken word to communicate. "Richie" displays the emotional distance of autistic children and will not maintain eye contact or show affection. His condition locks him away from his family. The day was beautiful, with only a slight breeze, yet a large swell threw breakers that curled thunderously on the cobble beach and rugged outcroppings. The sun danced on the waves; we beachcombed and explored, but it didn't take long for everyone to notice the effect the ocean was having on Richie. He was drawn to the waves; his father took him out on the rocky tidal flats to see the breakers shoot salty spray high into the air. We sat on the beach and watched the two figures in the distance. When my friend came back he was visibly moved, "I can't believe it," Richie's father told his wife breathlessly. "Richie looked at the breakers and was so engaged; he lifted his arms out wide and kept saying, 'I be free, I be free' over and over. Where did that come from? Where did he get that?"

I told my story as an entry for my writing notebook that could lead to interesting reflection later. Predictably, the students wanted to probe deeper into the story. "What did Richie mean by 'I be free?'" asked Maurice.

"I'd say it was the wind and the power, you know like sometimes you just want to go out in a big storm... just to be in it," replied Mark. Jessica wanted more information, "Had Richie been at a beach before? Were there other people on the beach?"

And so it went until I said, "Okay let's respond someway in our notebooks. What does the story remind you of? What thoughts came to you? How did you feel as you listened? Why? Do you have a story of something wondrous that happened to you outside? Something that happened to someone you know? I began with Perl's (2004) Guidelines for Composition that I adapted for this project. The students' ability to speak with language and experience through a theory of embodied knowing would honour a stance of ecological holism through inclusivity. For, ultimately, this project is not about the words generated – language per se – but about the language-ing human beings sitting before me. These were children who were embedded in their places, in their history, in their culture. It was my task to allow these children to speak back to and extend that history and culture, using the given language to create something new, to uncover what is often taken for granted in their relationship with the natural world. It was fitting to acknowledge our tight coupling with the environment and start with the body.

After asking them to find a way to get comfortable, to close their eyes or look away from anything distracting, to sit quietly for a minute and think about their breathing, the students settled. There were a few stifled giggles, but for the most part they shook out their hands and sat breathing quietly. I proceeded through a series of questions that helped them get a deeper sense of how my story made them feel. I asked them to jot down connections and memories that the story helped evoke. I provided some writing time after each question or prompt. I asked, "How are you right now?" What did you find most intriguing in the story?" "Why do you think it is?" "What draws you to this idea?" "What is it all about for you?" I paused between questions and they jotted notes.

I reminded them frequently to write whatever comes. "What's missing I inquired?" "Does it feel complete?" "Are there any images, words, or phrases that allow you to express something in a fresh way?" They looked at the list of ideas and jotted notes to see which ones spoke to them and were the most compelling, all the while being asked to focus on their felt sense. They sat quietly with a topic in mind, to sense what the ideas evoked in them. They were asked to consider the "So what?" of the topic; to allow the felt sense and emerging meaning to come together. And then I stopped talking because I could see that some were actively engaged in writing already. I moved quietly around the room and felt as if I was being intrusive as more students began to write - intently. I went to my desk and sat down with a sense of relief, tinged with excitement for what was happening in the moment.

In the coming days I provided prompts in the form of questions and statements that allowed the students to further explore the relational quality of their lives. I used Perl's adapted *Guidelines for Composition* on a weekly basis and the students slowly began to speak from within their own experiencing with the world. But it was not without difficulties. At first my prompts puzzled them. I sat with students to assure them that writing about the family potato garden was indeed, "alright" to put in their notebooks. It took some convincing to convey that when we really give it some thought, "Nothing" is not an accurate response to the question, "What do you see from your living room window?"

My students' reluctance to attach importance to that which is closest to them, while frustrating, should have come as no surprise. In relating to a colleague this challenge to allow the students to observe, hear, smell and feel that which surrounds them in the everyday, she replied, "Of course, they don't think it's important; you never really appreciate what's around you until you have to leave it and then come back." This troubled me, as I had heard it before as conventional wisdom. But as the students continued to write in the coming weeks of the project I came to understand that the belief that leaving a place allows us to better appreciate it on our return places emphasis, not on the leaving, but on, the lack of opportunity to get to know our places when we are there. Too often the curriculum fosters the outward gaze, the migratory stance, that what is important, worthwhile and wondrous exists not in the immediate, the personal and the local, but in the world "out there". The focus often shifts to that mythic globalized space which in effect exists nowhere. One early hurdle in the study was to allow the students to understand the worth in coming to know and value the web of natural and cultural relationships that define their lives.

Providing prompts for students was not meant to be prescriptive, but to provide for them guideposts to follow as they filled the pages of their notebooks. I wanted students to make their writing notebooks a part of their lives, not only in class but outside as well. My intent fell short of the mark. In the third week of the project a quick survey of the class indicated that the notebooks were generally regarded as an in-class activity. To encourage out-of-class writing I provided some guidance and parameters: five entries a week. At least one of those entries was to be about some aspect of life outside – out-of-doors, a favourite place, an interesting natural feature, a memory, a routine or family activity. For most students the direction was just the impetus they needed. Like most of us, adolescents require and welcome the liberating constraints that assist them to focus on the task at hand. Randy Bomer (1995) quotes Maxine Green on this same point, that freedom doesn't always mean freedom from; it might mean freedom to (p. 53). In setting up the writing notebooks as a means to nurture ecological sensibility, I too was learning that my students had to learn to explore freely in the classroom, to play, to improvise, to follow thoughts and make connections. They had to learn how opening their awareness to what is inside them is inextricably connected to what is outside them.

Gradually, it came together for most students. Over the weeks the number and quality of entries improved. Most started out as literal, straightforward observations.

> From my living room window I get a wonderful view of the ocean. Not only the ocean do I see but an old abandoned blue house. It has been there as long as I can remember. There is a window on the side of the house that I can see. In that window I can see a small basket with two flowers in it.

An early strategy used by some students was to rely on diary-like entries in which their observations and thoughts were recorded. Their attention to detail developed gradually. Ryan wrote in one early entry;

It is a chilly October evening. The sky is clear, the sun is just setting over the Northern Peninsula in the far west and a biting cold, yet, gentle wind is blowing. I see a tiny navy blue Toyota Corolla and wood smoke sinks in the air. Next to the vehicle I see a neatly stacked wood pile, cut, cleaved and ready to burn.

Some students hung on to "what I saw on the bus ride home" longer than I would have liked, while other students turned over insightful and touching entries that would find their way into larger pieces. At the end of each week I collected their writing notebooks and commented on their entries; I would ask further questions, offer writing advice. This was a dialogue; I could hear their voices and I could respond. Over the weeks the notebooks slowly evolved into the space I had hoped they would, a place to explore emerging consciousness of their connectedness to a larger living landscape. This intimate exploration of the personal, the unique, the local and the immediate was echoing Grumet's (1988) belief that if we do not use our personal experiences we risk turning away from, "the places we were most thrilled, most afraid, most ashamed, and most proud... our experience gathers up its convictions and its questions and quietly leaves the room" (p. xvii).

Over time, the students' attention was drawn to the world of the unique, to particulars, to emotion and to the insight that emerges from the embodied integration of a textual animal. Room was being made for other voices, other presences. The transactive space between reader and text was drawing a power from the interplay and interconnection.

Let us conclude with just one of many samples of the students' writing that points to the potential of language to allow for the expression of a subtle unfolding of awareness and attunement in response to experiential processes of engagement and involvement.

Emily: "Toward a silent core of waiting..."

I was born and raised in this place. I know most of the customs here. As spring and summer approach, when the sun is melting the last of the snow the harbour of my little town starts to fill with fishing boats from all over Newfoundland and Canada. I myself have never really paid much attention to the people that live their lives upon the sea. Mainly because during spring I'm in school, during summer I am in Cadet Camp. But last summer my friend and I went down to the wharf. She said there were a lot of people tied up there. I was surprised to find a twelve-year-old boy that worked on the boats. He told me he worked there all summer fishing for mackerel. I don't know the name of the boat or where they were from. It wasn't a large boat but it was red with a deep blue railing. He was friendly but serious about his work.

They were in the harbour for about two weeks –going out and coming in with mackerel for the plant. Sometimes

they would get a lot but other times there would hardly be any. They had to tie up for three days just because the engine needed a part that they couldn't get here. But he never seemed bored or upset. It was like, "That's just the way it is." He seemed like he was always waiting; waiting to go out, waiting for the part, waiting for the plant, waiting for the wind, waiting for inspectors, waiting for the mackerel. But he seemed to not mind it, he was always doing something. I was surprised to find a twelve-yearold boy living like this. Now that the summer has ended there are no boats in the harbour and I find myself thinking about that boy. Will he be back? Is he still risking his life on the sea for money? A long winter awaits me and I'll wait too and watch the sea waiting for when the boats will fill the harbour once again.

Emily's entry is imbued with a passage of time, of being "out of time", out of another era. The appearance of a twelve-year-old boy working on a fishing boat surprises her. There is the definite sense that the boat being described is not equipped with the latest technology; it is a smaller, simpler vessel. Without the latest navigational and weather tracking aids people must rely on other means to predict the conditions. There is a closer contact with the elements rather than attending to blips on an illuminated screen; we must turn our faces to the sky, sense the freshening wind, and attune ourselves to a world alive with signs that speak. Here I am reminded of Adrienne Rich (1981) who writes,

The glass has been falling all afternoon,

And knowing better than the instrument

What winds are walking overhead, what zone

Of gray unrest is moving across the land,

I leave the book upon a pillowed chair

And walk from window to closed window, watching

Boughs strain against the sky (p. 17)

There is the sense here of attunement to a sensate reciprocity that is more primordial, a participatory mode of perception. The poet paces, from window to window, knowing, sensing that which, as she describes later in the poem, "Moves inward toward a silent core of waiting..." There is a patient acceptance of a bodily inherence, of delicate sensibilities, attuned to an animate Earth.

Emily describes the waiting involved in this small family fishing effort: "waiting to go out, waiting for the part, waiting for the mackerel, waiting for the wind..." Without technology the need for patience and respect is evident. Is patience and respect necessarily lost when contact is given over to technology? Lamenting what is lost to technology doesn't mean we should eliminate technology. Working on the ocean has been made immeasurably safer and more comfortable by technology. Problematizing our relationship with technology can, however, help to brace against it and afford some space in which we may question its current pattern and reclaim it as an "artful serving of all life" (Fisher, 2002, p. 156). Technology can be reclaimed to assist in the restrained and respectful use of the life communities to which we belong and on which we rely to sustain us.

Emily's subject, the twelve-year-old visitor to her village, "is never bored or upset." He is not impatient, but actively engaged, "friendly but serious about his work," in bodily-felt contact with the life-giving traditions of fishing. There is a vigorous, enduring quality to his waiting. His patience is imbued with strength and vitality, a quiet forbearance and contentment that seem rare, almost antiquated today. Emily points out ... "he is always doing something"; he is engaged in the present, in the matrix of relations and interactions that is his existence. Something touches Emily deeply about the boy, "the summer has ended... and I find myself thinking about that boy. Will he be back?" Is it that she is struck by a child so engaged, so in contact? She, too, by

coming in contact with the boy is in touch with a world she admits she knows little about. Her writing indicates a new meaning and an attunement that is new for her. She has been affected, implicitly, but through her writing has symbolized how she has been touched, and in this sense makes explicit contact. Her notebook entry offers an expressive voice for making contact. Emily's entry concludes that she, too, will wait and watch: "And I'll wait too and watch the sea waiting for the boats..." an emergent patience, an awareness of, a responsiveness to, a sensibility for, the unfolding of the seasons, and the rhythms of tide and time.

Conclusion

During the time I spent with children reimagining a space to cultivate and nurture ecological interconnection through language, I was to learn through the imaginative, participatory and bodily encounters with reading and writing that past, present, and future are entangled, and therefore, co-evolving. This co-evolutionary space of the linguistic, poetic, creative, imaginative and expressive dimension is where we are able to make and remake images of ourselves and of our relationships. In allowing a relational mode of being in the poetic space, students are able to sensitively address inner connectivities of body, mind, emotions and spirit and begin to nurture, to awaken, to advance, to realize, and to understand a deeper connection with, and sensibility for, community and the living landscapes in which they dwell.

The student notebook entries revealed memories, anecdotes, experiences, thoughts and insights out of which emerged an opportunity for me, as a researcher and teacher, to better understand an orientation of patient regard for the greater life-force. The inquiry helped to see how the concept of *giveness* and the *gift* characterizes some children's relationship with the living world. The language arts classroom and the

writing, reading and response that took place there provided a glimpse into the process of deepening the students' sense of a sustainable and ethical relationship with the "other than human" with whom they share their places. In essence, through this inquiry the students were given an opportunity to explore their inner ecology as textual animals, to cultivate attunement through language to their senses and body intelligence.

As a contribution to the field of curriculum theory, this study is guided by a view of education for radical interconnectedness. David Orr (1992) succinctly outlines a vision of education in which the goal is not just mastery of subject matter, but making connections. He writes of his curricular vision,

First, it aims toward the establishment of a community of life that includes future generations, male and female, rich and poor, and the natural world. The essence of community is recognition, indeed celebration, of interdependence between all parts. Its indicators are the requisites of sustainability, peace, harmony and justice and participation. (p. 138)

This inquiry is predicated on a vision of curriculum studies and theorizing that is inclusive, encompassing, expansive, generous and lifeaffirming and that reaches toward a place of deep transformation. William Pinar (2004) says curriculum theory is "about discovering and articulating, for oneself and with others, the educational significance of the school subjects for self and society in the ever-changing historical moment" (p. 16). To Pinar's observation about the significance of school subjects for "self and society," I would add "for self, society *and Earth.*" Curriculum may be understood differently when we believe that we are language-ing beings, textual animals coupled to our environments through the creative force of our imaginations, and that our school subjects may be links of possibility designed to deepen relationship with the larger living world.

References

- Abrams, D. (1996). *The spell of the sensuous*. New York, NY: Random House.
- Abrams, D. (2010). *Becoming animal: An earthly cosmology*. New York, NY: Random House.
- Abrams, D. & Jardine, D. (2000). All knowledge is carnal knowledge: A correspondence. *Canadian Journal of Environmental Education*, *5*, Spring, 167-177.
- Alberta Learning. (2002). *Program of studies: Junior high schools*. Retrieved October 26, 2010 from

http://ednet.edc.gov.ab.ca/k_12/curriculum/bySubject/jr_2003.pdf.

- Berry, T. (1999). *The great work: Our way into the future.* Toronto,ON: Random House.
- Berry, W. (2000). *Life is a miracle: An essay against modern superstition*. Washington, DC: Counterpoint.
- Bomer, R. (1996). *Time for meaning: Crafting literate lives in middle and high school.* Portsmouth, NJ: Heinemann.
- Borenstein, S. (2011, June 21). Health of the world's oceans is bleak. *The Globe and Mail*. Retrieved from http://www.theglobeandmail.com/news/world/health-of-worlds-

oceans-is-bleak/article2068252/

- Borgmann, A. (1992). *Crossing the postmodern divide*. Chicago, IL: University of Chicago Press.
- Bortoft, H. (1996). *The wholeness of nature: Goethe's way toward a science of conscious participation in nature.* New York, NY: Lindisfarne Books.
- Capra, F. (2002). *The hidden connections: Integrating the biological, cognitive and social dimensions of life into a science of sustainability.* New York, NY: Doubleday.

- Davis, B., Sumara, D., Luc-Kapler, R. (2000). *Engaging minds: Learning and teaching in a complex world*. Mahwah, New Jersey: Lawrence Erlbaum.
- Doerr, M. (2004). *Currere and the environmental autobiography. A phenomenological approach to teaching ecology.* New York, NY: Peter Lang.
- Fisher, A. (2002). *Radical ecopsychology: Psychology in the service of life*. Albany, NY: SUNY Press.
- Government of Newfoundland and Labrador. (1993). *Environmental* science 3205: Course description. Retrieved October 28th, 2003 from <u>http://www.gov.nf.ca/sp/sh/enviro_sci3205/sci3205.pdf</u>
- Government of Newfoundland and Labrador. (1999). *English language arts Grades 7-9: A curriculum guide.*
- Heard, G. (1995). *Writing toward home: tales and lessons to find your way*. Portsmouth, NJ: Heinemann.
- Howard, P. (2006). In search of a living literacy: Language, literature and ecological sensibility. (Unpublished doctoral dissertation). University of Alberta, Edmonton, Alberta, Canada.
- Howard, P. (2007). The pedagogy of place: Reinterpreting ecological education through the language arts. *Diaspora, Indigenous and minority education: An international journal*,1(2),109-126.
- Gendlin, E. (1981). Focusing. New York, NY: Bantam.
- Gendlin, E. (1992a). Befindlicheit: Heidegger and the philosophy of psychology. In K. Hoeller (Ed.), *Heidegger and psychology*. New York, NY: Brill.
- Gendlin, E. (1992b). The wider role of bodily sense in thought and language. In M. Sheets-Johnston(Ed.), *Giving the body its due*.(pp. 192-207) Albany, NY: SUNY.
- Greene, M. (1988). *The dialectic of freedom*. New York, NY: Teachers College Press.

Jardine, D. (1998). To dwell with a boundless heart: Essays in curriculum

theory, hermeneutics and ecological imagination. New York, NY: Peter Lang.

- Jardine, D. (2000). *Under the tough old stars: Ecopedagogical essays*. Brandon, VT: The Foundation for Educational Renewal.
- Kidner, D. (2000). Fabricating nature. A critique of the social construction of nature. *Environmental Ethics*. 22, Winter, 339-357.
- Kohak, E. (1984). *The embers and the stars: A philosophical inquiry into the moral sense of nature.* Chicago, IL: University of Chicago Press.
- Louv, R. (2005). Nature deficit: Is ADHD research overlooking the green factor? *Orion*, 24(4, 70–71.
- Manteaw, B. (2008). When business goes to school: Neoliberalism and education for sustainable development. *Journal of education for sustainable development*, 2(2), 119 -126
- McMurtry, J. (2002). *Value wars: The global market versus the life economy.* London, UK: Pluto Press.
- Merleau-Ponty, M. (2002a). *Phenomenology of perception*. New York, NY: Routledge Classics. (Original work published 1962)
- Merleau-Ponty, M. (2002b). *The visible and the invisible*. Evanston, IL: Northwestern University Press. (Original work published 1968).
- Murray, D. (1990). Write to learn. New York, NY: Harcourt.

Ng-a-Fook, N. (2010). An/nother bell ringing in the empty sky: Greenwashing, curriculum, and eco-justice. *Journal of the Canadian Association for Curriculum Studies*, 8(1), 41-67.

- Norberg- Hodge, H. (2003). Waking from the corporate American dream. *Orion.* 22(6), 11.
- Nussbaum, M. (1990). *Love's knowledge: Essays on philosophy and literature.* New York, NY: Oxford.
- O'Sullivan, E. (1999). *Transformative learning: Educational vision for the* 21st *century*. Toronto, ON: University of Toronto Press.
- O'Sullivan, E. and M. Taylor. (Eds.). (2004) *Learning toward an ecological consciousness*. New York, NY: Palgrave Macmillan.

- Pinar, W. (Ed.). (1975) *Curriculum theorizing: The reconceptualists*. Berkeley, CA: McCutchan.
- Perl, S. (2004). *Felt sense: Writing with body*. Portsmouth, NH: Boynton Cook.
- Peterson, A. (2001). *Being human: Ethics, environment, and our place in the world*. Los Angeles, CA: University of California Press
- Pinar, W. (2004). *What is curriculum theory?* Mahwah, NJ: Lawrence Erlbaum.
- Rich, A. (1981). Stormwarnings. In B. Gelpi and A. Gelpi (Eds.), *Adrienne Rich's poetry and prose* (p. 3). New York, NY: Norton.
- Roth, C. and C.Leslie.(2000). *Keeping a nature journal: Discover a whole new way of seeing the world around you.* North Adams, MA: Storey Books.
- Scholes, R. (2001). *The crafty reader*. New Haven, CT: Yale University Press.
- Seamon, D. (1998). Goethe, nature and phenomenology. In D. Seamon and A. Zajonc (Eds., *Goethe's way of science: A phenomenology of nature*. (pp. 1-14). Albany, NY: State University of New York Press.
- Seamon, D. and A. Zajonc. (Eds.). (1998). *Goethe's way of science: A phenomenology of nature*. Albany, NY: State University of New York Press.
- Smith, M. (1999). To speak of trees: Social constructivism, environmental values, and the future of deep ecology. *Environmental Ethics*,21(1), 359-376.
- Snyder, G. (1990). *The practice of the wild*. New York, NY: North Point Press.
- Stein, G. (1970). What are masterpieces. Los Angeles, CA: Conference Press
- Sumner, J. (2008). From academic imperialism to the civil commons: Institutional possibilities for responding to the United Nations Decade for Sustainable Development. *Interchange*, 39 (1), 77-94